



Colour Television Service Manual

Model C21EF57B

(U.K)

Service Ref. No. C21EF57B-00

Service Ref. No. C21EF50B-00

CB5156 CB5153

PRODUCT CODE

1113 23702 (C21EF57B-00)

1113 23700 (C21EF50B-00)

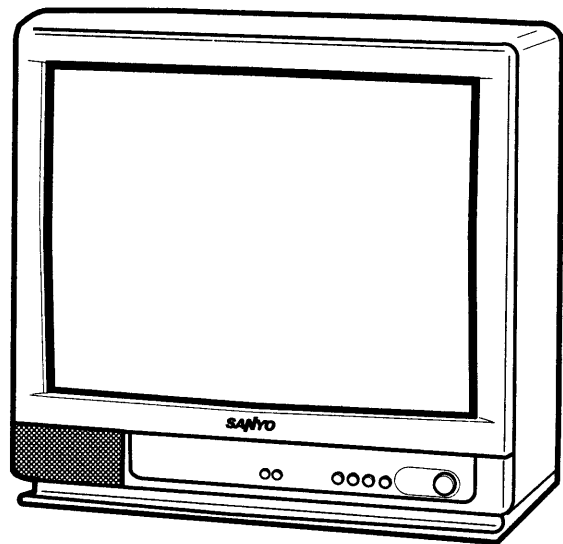
ORIGINAL VERSION

Chassis No. EC3-A21

Give complete "SERVICE REF. NO." for parts order or servicing, it is shown on the rating sheet on the cabinet back of the TV set.

Note

This TV receiver will not work properly in foreign countries where the television transmission system and power source differ from the design specifications. Refer to the specifications for the design specifications



Specifications

Power source	AC 220~240V 50Hz
Television system	System I
Colour system	PAL
Receiving channel	UHF 21~69
Aerial input impedance	75ohm
AV terminal	
21 Pin socket	CENELEC standard
Sound output	3.0 watts
Picture tube	55cm diagonal, 90 degree
(Visible picture diagonal)	51cm
Dimensions (WxHxD)	516 x 471 x 495 mm
Weight	20.5Kg

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SAFETY PRECAUTION

- 1: An isolation transformer should be connected in the power line between the receiver and the AC line when a service is performed on the primary of the converter transformer of the set.
- 2: Comply with all caution and safety-related notes provided on the cabinet back, inside the cabinet, on the chassis or the picture tube.
- 3: When replacing a chassis in the cabinet, always be certain that all the protective devices are installed properly, such as, control knobs, adjustment covers or shields, barriers, isolation resistor-capacitor networks etc. Before returning any television to the customer, the service technician must be sure that it is completely safe to operate without danger of electrical shock.

X-RADIATION PRECAUTION

The primary source of X-RADIATION in the television receiver is the picture tube. The picture tube is specially constructed to limit X-RADIATION emissions. For continued X-RADIATION protection, the replacement tube must be the same type as the original including suffix letter. Excessive high voltage may produce potentially hazardous X-RADIATION. To avoid such hazards, the high voltage must be maintained within specified limit. Refer to this service manual, high voltage adjustment for specific high voltage limit. If high voltage exceeds specified limits, take necessary corrective action. Carefully follow the instructions for +B1 volt power supply adjustment, and high voltage adjustment to maintain the high voltage within the specified limits.

PRODUCT SAFETY NOTICE

Product safety should be considered when a component replacement is made in any area of a receiver. Components indicated by mark $\triangle$ in the parts list and the schematic diagram designate components in which safety can be of special significance. It is particularly recommended that only parts designated on the parts list in this manual be used for component replacement designated by mark $\triangle$. No deviations from resistance wattage or voltage ratings may be made for replacement items designated by mark $\triangle$.

This is a diagram for all models and therefore differs slightly from the actual block diagram.



CIRCUIT DESCRIPTION

1. POWER SUPPLY

The power supply circuit of the EC3-A chassis is composed of a rectifier smoothing circuit, an oscillation circuit, a control circuit and an output rectifier circuit. The AC input voltage is full-wave rectified by the rectifier smoothing circuit, and an unstable DC voltage is generated at both terminals of the smoothing capacitor C307. This voltage is input to the oscillation circuit. The oscillation circuit is provided with a blocking oscillator circuit that switches the switching transistor Q313 ON and OFF, and an oscillation frequency and a duty square wave pulse are generated in the input windings according to operation of the control circuit. A square-wave pulse whose size is dependent on the turn ratio of the input and output windings is obtained in the output winding. This is rectified in the output rectifier circuit, and the desired DC voltage is obtained.

2. IF & DEFLECTION (TDA8361)

The IF output signal from the tuner passes through the SAW filter, and it is input to pin45 and pin46 of IC101. The signal input to the IC passes through the IF amplifier, video detection and video amplifier circuits and is output from pin7 as a composite video signal. This signal is supplied to the video and chroma amplifier stages through the buffer of Q131.

The sync.-separation circuit separates the video signals applied to pin13(internal video signal) or pin15(external video signal) to vertical- and horizontal-sync. signals respectively. The horizontal oscillator requires no external components and is fully integrated. The oscillator is always running when the start-pin36 is supplied with 8V. Horizontal drive signal is output from pin37. VR401 is for adjustment of the horizontal centring. The separated vertical-sync. signal from sync. separation circuit passes through the vertical-separation circuit, and applied to trigger divider circuit. The horizontal oscillation pulse and input vertical sync. pulse are monitored by the trigger divider circuit, and switching 50Hz and 60Hz system, the vertical amplitude automatically adjusted for 50Hz and 60Hz. The output signal from the trigger divider triggers the oscillation of vertical oscillation circuit consisting of C401, R402 and pin42, and vertical drive pulse is output from pin43. VR451 is for changing the amount of AC feedback applied to pin41 and for adjustment of the vertical amplitude.

3. VIDEO CHROMA & R.G.B. (TDA8361)

The composite video signal output from the pin7 of IC101 passes through Q131 to Q134, and it is supplied to pin13. The external video signal output from SCART is supplied to pin15. The video signal input to pin13 or pin15 is separated to luminance (Y) signal and chroma signal in IC101. These pins are used in common with H/V-sync. separation input. The peaking of Y signal is adjusted by DC voltage of pin14. ("SHARPNESS"

control) The chroma signal is divided into R-Y and B-Y chroma signals, demodulated in IC101, and output from pin30 (R-Y) and pin31 (B-Y). These chroma signals pass through the 1H delay line circuit (IC270), and they are input to pin29 (R-Y) and pin28 (B-Y). These R-Y/B-Y signals pass through RGB matrix circuit and RGB selector circuit of IC101. The internal RGB signals are generated in RGB matrix circuit and the RGB selector, consisting linear amplifiers, clamps and selects either the internal RGB signals or the external RGB signals input from pin22(R), pin23(G), pin24(B). Selection is controlled by the voltage at the RGB switch control (pin21) and mixed RGB modes are possible since RGB switching is fast. The RGB switch also functions as a fast blanking pin by blanking the RGB output stages; here internal and external RGB signals are overruled. The colour gain is controlled by DC voltage of pin26. ("COLOUR" control) The contrast control voltage at pin25, and the brightness control voltage at pin17 control DC level of RGB signals. The RGB signals are finally buffered before being available at the RGB output pins [pin20 (R), pin19 (G), pin18 (R)].

4. AUDIO OUTPUT(AN5265)

The audio signal output from pin50 of IC101 is input to pin2 of IC171 and passes through the pre-amplifier circuit and drive circuit, after which it is input to the audio amplifier. The audio amplifier is an SEPP (single-ended, push-pull) OTL type and output to pin8 to directly drive the speaker.

5. VERTICAL OUTPUT (LA7832)

An IC (LA7832) is used for the vertical output circuit in this chassis. The vertical drive pulse from pin43 of IC101 is input to pin4 of IC451. This pulse drives IC451, and vertical scanning is performed. In the first half of scanning a deflecting current is output from pin2 and passes through the following path:

Vcc(B4) → D451 → pin3 → pin2 → DY → C461 → VR431/R459. An electric charge is then stored in C461. In the last half of scanning the current path is C461 → DY → pin2 → pin1 → VR431/R459 → C461. In this way, an amplifying sawtooth waveform current flows directly to DY to perform electron beam deflection. Next, in the first half of the banking period the vertical drive pulse suddenly becomes OFF, and in order to reduce the current flowing to DY, the current path becomes as follows by the inductance of DY:

DY → pin2 → pin1 → VR431/R459 → C461 → DY. Also, when the charge of DY has dissipated, the current path becomes Vcc24V → pin6 → pin7 → C452 → pin3 → pin2 → DY → C461 → VR431/R459, and when the prescribed current value is reached, the vertical drive pulse becomes ON. This completes one cycle.

6. HORIZONTAL OUTPUT

A horizontal oscillation signal is output from pin37 of IC101 and switches the drive transistor Q431. This switching signal is current amplified by the drive transformer T431 and drives the output transistor Q432. When Q432 becomes ON, an amplifying current flows directly to DY through C441/442 → DY → Q432 → GND, and deflection is performed in the last half of the scanning period. Next, when Q432 becomes OFF, the charge that had been stored in DY up to that point releases a resonance current to the resonant capacitors C420 and C437 and charges them. The current stored in C420 and C437 is then flowed back to DY, and an opposite charge is then stored in DY. This opposite charge then switches the dumper diode in Q432 ON, the resonance state is completed, and an amplifying current is then flowed again directly to DY through the dumper diode. By this means, deflection in the first half of the scanning period is performed, and when Q432 becomes ON at the end of the first half of the scanning period, deflection during the last half is begun, thus completing one cycle.

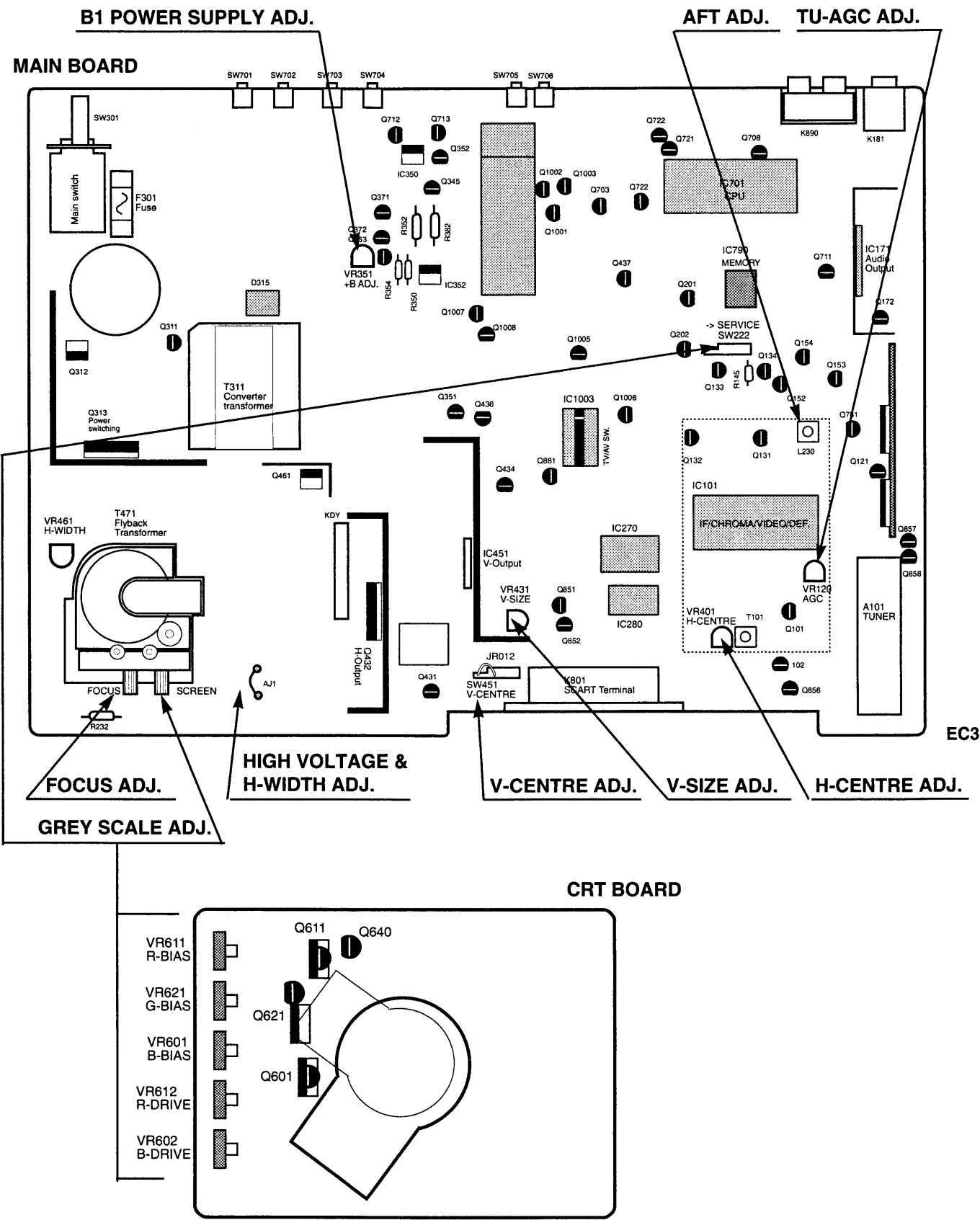
7. CPU

Pin description

Pin1: H-sync. input (Horizontal pulse for OSD)
Pin2: V-sync. input (Vertical pulse for OSD)
Pin3: Volume control output (6-bit DAC)
Pin4: Colour control output (6-bit DAC)
Pin5: Brightness control output (6-bit DAC)
Pin6: Contrast control output (6-bit DAC)
Pin7: Sharpness control output (6-bit DAC)
Pin8: 50Hz/60Hz switch
Pin9: AV1/AV2 output (L:AV1)
Pin10: TV/AV output (L:AV)
Pin11: Option switch
Pin12: I²C bus SCL (Serial clock for memory)
Pin13: I²C bus SDA (Serial data for memory)
Pin14: Tuning voltage output
Pin15: Ident signal input (L:No signal)
Pin16: R/C signal input
Pin17: SCART auto switch input (H: VCR play)
Pin18: GND
Pin19: Ignor output
Pin20: Option switch (AV2)
Pin21: AFT input
Pin22: Not used
Pin23: Supply Ground
Pin24: Oscillator input for CPU
Pin25: Oscillator output for CPU
Pin26: Supply Ground
Pin27: Power supply(+5V)
Pin28: Oscillator output for OSD
Pin29: Oscillator input for OSD
Pin30: Reset input
Pin31: Protect signal input (L:Power circuit defects)
Pin32: Not used(GND)

Pin33: AFT signal input
Pin34: Option switch (GND)
Pin35: Key scan signal input
Pin36: Timer-ON (Timer LED drive)
Pin37: S-VHS detect input(Sin:H)
Pin38: SIF switch output
Pin39: France L/L' switch output
Pin40: France L/L' switch output
Pin41: Posi./Nega. switch output
Pin42: Band switch output (L: UHF)
Pin43: Band switch output (L: VHF-H)
Pin44: Band switch output (L: VHF-L)
Pin45: 5.5MHz switch output
Pin46: Line mute output
Pin47: Mute output
Pin48: Power ON/OFF output (H:ON)
Pin49: Blanking output for OSD
Pin50: Not used (Open)
Pin51: Green output for OSD
Pin52: Red output for OSD

SERVICE CONTROL ADJUSTMENT



B1 POWER SUPPLY ADJUSTMENT

1. Set VR351 to be mechanical centre before pressing the main switch.
2. Tune the receiver to PAL circular pattern.
3. Set brightness and contrast controls to normal.
4. Connect digital V-meter between R350 and R354.
5. By using VR351, adjust voltage to 130 ± 0.5 V

AFT ADJUSTMENT

1. Tune the receiver to the clearest station.
2. By using L230, adjust AFT to obtain the best picture.

AGC ADJUSTMENT

NOTE: Do not attempt this adjustment with weak signal.

1. Tune the receiver to the clearest station.
2. Set AGC VR(VR120) in direction which causes snow noise to appear, then in the opposite direction until snow noise just disappears.

GREY SCALE ADJUSTMENT

[SCREEN VR ADJUSTMENT]

1. Tune the receiver to the white pattern.
2. Set brightness and contrast control to normal.
3. Set SW220 to "SERVICE" position.
4. Set VR601 and VR611 to be mechanical centre.
5. Turn VR602, VR612 and VR622 fully counter-clockwise.
6. Set screen VR for one colour to be just visible.

[BIAS VR ADJUSTMENT]

7. By using VR602, VR612 or VR622, adjust line to be white.
8. Set SW220 to "NORMAL" position.

[DRIVE VR ADJUSTMENT]

9. By using VR601 and VR611, adjust white balance.

HIGH VOLTAGE & WIDTH ADJUSTMENT

[HIGH VOLTAGE ADJUSTMENT]

1. Tune the receiver to PAL circular pattern.
2. Set brightness and contrast controls to maximum.
3. Connect digital V-meter to both terminals of R232(left side)(+), and high voltage meter to CRT anode.
4. Confirm high voltage to be 25.0 ± 1 KV at beam current 1.1mA, and less than 28.0 KV at 0 beam current.

[H-WIDTH ADJUSTMENT]

5. If H-width is too wide or narrow, connect or disconnect a lead wire AJ1.
6. Reconfirm high voltage.

H-CENTRE ADJUSTMENT

1. Tune the receiver to circular pattern.
2. Adjust H-centre by using VR401.

V-CENTRE ADJUSTMENT

1. Tune the receiver to circular pattern.
2. Adjust V-centre by using SW451.

V-SIZE ADJUSTMENT

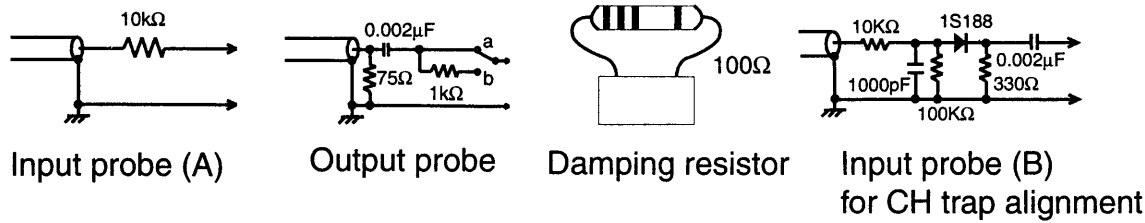
1. Tune the receiver to circular pattern.
2. Adjust V-size by using VR431.

FOCUS ADJUSTMENT

By using FOCUS VR, adjust focus control for well scanning lines.

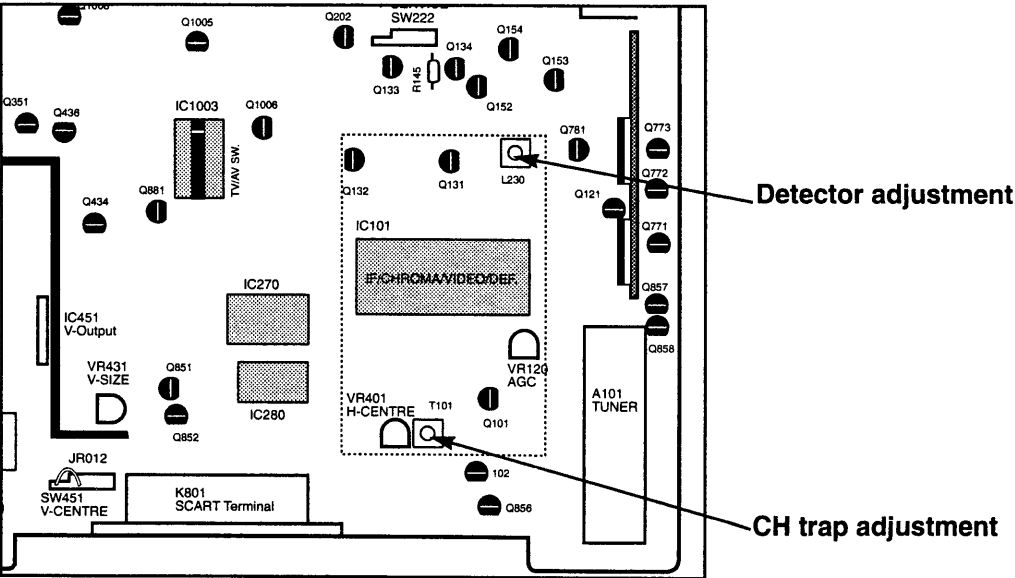
CIRCUIT ALIGNMENT

VIF ALIGNMENT

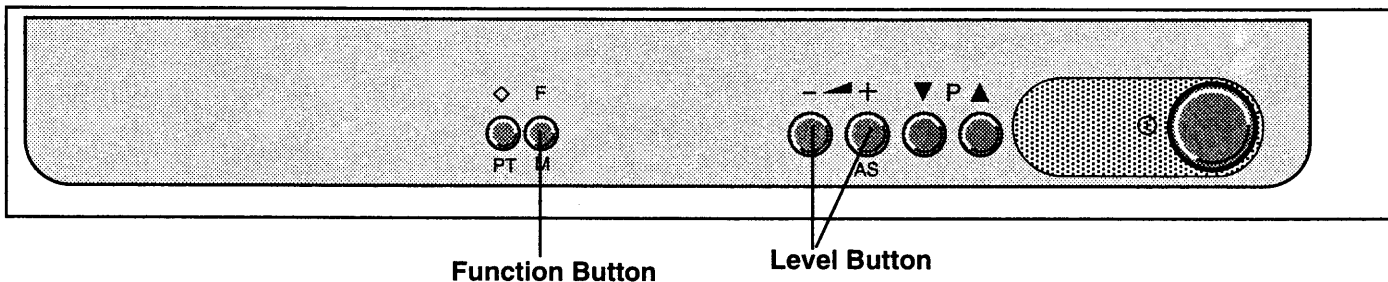


		DETECTOR ADJUSTMENT	CH TRAP ADJUSTMENT
SETTING	DC 15V AGC voltage (4.3-4.5V) Output probe	R352 & R382 IC101-48 p Tuner IF (Side b) R145 & SW220	R352 & R382 No Tuner IF (Side a) Q101-C (Use prove B)
	Input probe (A)	No	No
	Band	No	No
Adjustment	Damping R	No	No
	System SW	I	I
VIF waveform	Sweep ATT	9	9
		By using L230, adjust "P" to be maximum amplitude.	By using T101, adjust "A" to bottom of channel trap.
VIF waveform			

MAIN BOARD



MEMORY IC REPLACEMENT (Important Notice)



When you replace a memory IC (IC790), it is necessary to initialise the IC as follows.

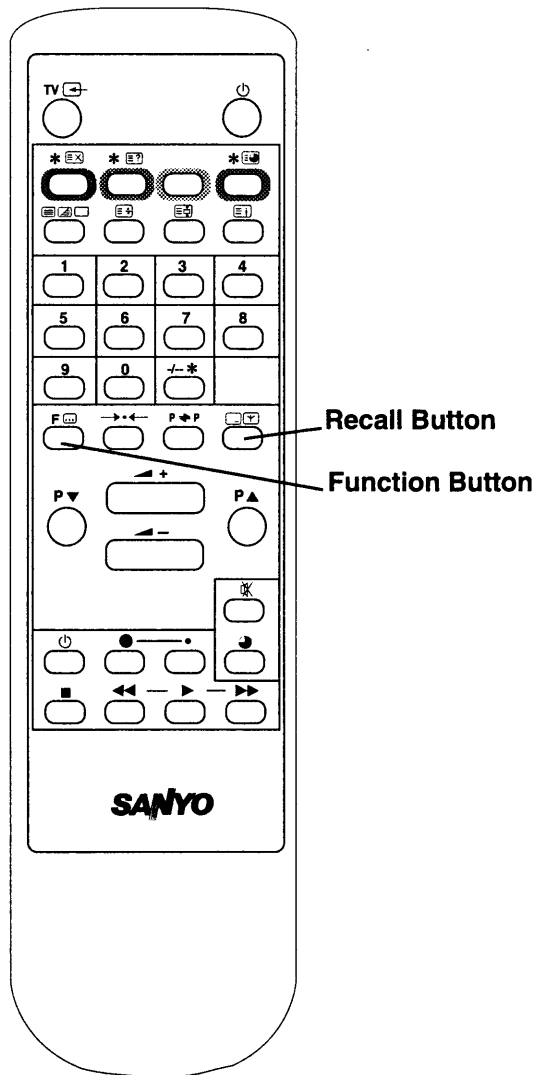
A. Initialisation of Memory IC

1. When you press and hold the Function button on the TV set and then press the Recall button on the RC transmitter, the following picture will appear on the screen.

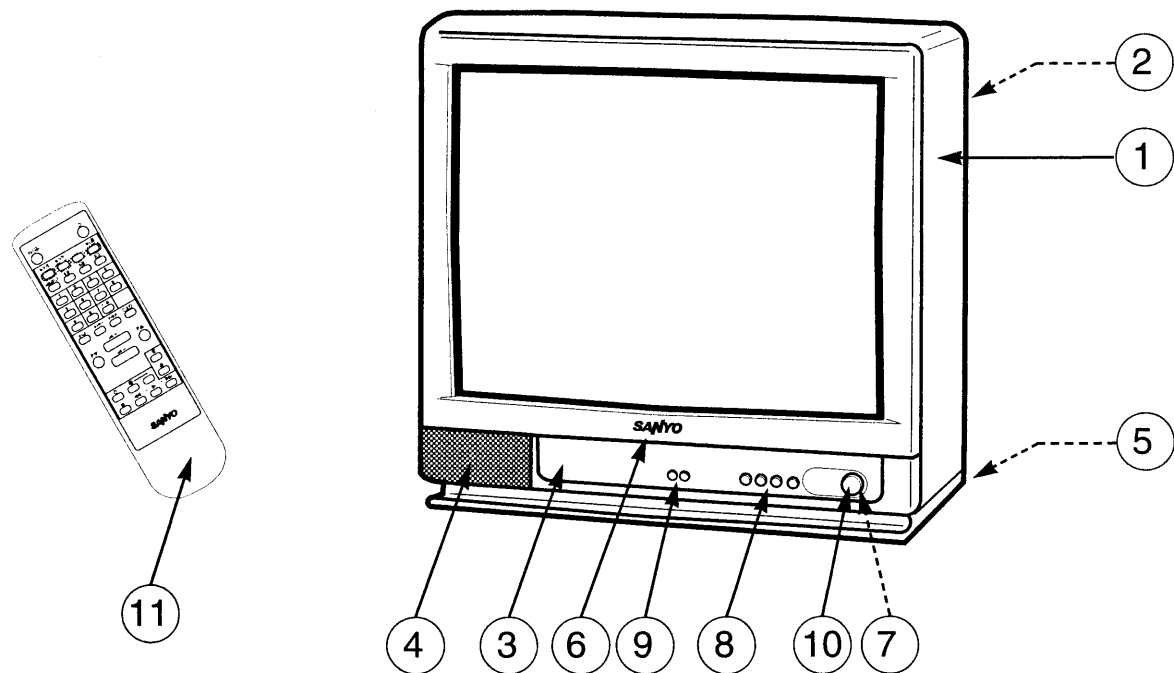
ITEM -1 SET→ 0

2. Confirm SET number of all items is "0" by pressing the Function button.
3. If it is not "0", change to "0" by the Level (+/-) button.
(Changing the SET number, automatically memorised.)
4. Press the Recall button, to return the normal TV mode.

For more information, please refer to "special functions" on the instruction manual.



CABINET PARTS LIST



C21EF57B (CB5156)

C21EF50B (CB5153)

REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION
1.	610 256 6499	ASSY,CABINET FR-E8JC	1.	610 256 6499	ASSY,CABINET FR-E8JC
2.	610 249 3214	CABINET BACK-E7KC	2.	610 249 3214	CABINET BACK-E7KC
3.	610 255 7114	DEC SHEET-E8JC	3.	610 256 6697	DEC SHEET-E8JL
4.	610 256 6598	GRILLE SP-E8JC	4.	610 256 6598	GRILLE SP-E8JC
5.	610 253 2449	HOLDER AC CORD-GBR-D4VA	5.	610 253 2449	HOLDER AC CORD-GBR-D4VA
6.	645 003 9256	BADGE,SANYO*46.2X13.5L45	6.	645 003 9256	BADGE,SANYO*46.2X13.5L45
7.	610 210 7302	COIL SPRING-D8HA	7.	610 210 7302	COIL SPRING-D8HA
8.	610 249 5331	BUTTON UNIT A-E7KC	8.	610 249 5331	BUTTON UNIT A-E7KC
9.	610 249 7366	BUTTON UNIT C-E7KC	9.	610 249 7366	BUTTON UNIT C-E7KC
10.	610 249 5355	BUTTON POWER-E7KC	10.	610 249 5355	BUTTON POWER-E7KC
11.	645 008 9572	ASSY,REMOCON JXTC	11.	645 008 9572	ASSY,REMOCON JXTC
	610 251 6821	ASSY,PWB,RC-PWBUNIT JXTA		610 251 6821	ASSY,PWB,RC-PWBUNIT JXTA
	610 251 6876	RC-CASE TOP-JXTA		610 251 6876	RC-CASE TOP-JXTA
	610 251 6883	RC-CASE BOTTOM-JXTA		610 251 6883	RC-CASE BOTTOM-JXTA
	610 251 6890	RC-BATTERY LID-JXTA		610 251 6890	RC-BATTERY LID-JXTA
	610 251 6906	RC-TRANSPARENT BOARD-JXTA		610 251 6906	RC-TRANSPARENT BOARD-JXTA
	610 255 1150	DEC RC SHEET-JXTC		610 255 1150	DEC RC SHEET-JXTC

CHASSIS ELECTRICAL PARTS LIST

Product safety should be considered when a component replacement is made in any area of a receiver. Components indicated by a  mark in this parts list and the circuit diagram show components whose value have special significance to product safety. It is particularly recommended that only parts specified on the following parts list be used for components replacement pointed out by the mark.

Note Parts order must contain Service Ref. No., Part No., and descriptions.

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
Read description in the Capacitor and Resistor as follows: CAPACITOR CERAMIC 100P K 50V Rated Voltage Tolerance Symbols: Less than 10PF A: Not specified B: ±0.1PF C: ±0.25PF D: ±0.5PF F: ±1PF G: ±2PF R: ±0.25-0PF S: ±0-0.25PF E: +0-1PF More than 10PF A: Not specified B: ±0.1% C: ±0.25% D: ±0.5% F: ±1% G: ±2% H: ±3% J: ±5% K: ±10% L: ±15% M: ±20% N: ±30% P: +100-0% Q: +30-10% T: +50-10% U: +75-10% V: +20-10% W: +100-10% X: +40-20% Y: +150-10% Z: +80-20% Rated value: P=pico farad, U=Micro farad Material: CERAMIC..... Ceramic MT-PAPER..... Metallized Paper POLYESTER..... Polyester MT-POLYEST..... Metallized Polyester POLYPRO..... Polypropylene MT-POLYPRO..... Metallized Polypropylene COMPO FILM..... Composite film MT-COMPO..... Metallized Composite STYRENE..... Styrene TA-SOLID..... Tantalum Solid AL-SOLID..... Aluminium Solid ELECT..... Electrolytic NP-ELECT..... Non-polarized Electrolytic OS-SOLID..... Aluminium Solid with Organic Semiconductive Electrolytic DL-ELECT..... Doble Layered Electrolytic RESISTOR CARBON 4.7K J A 1/4W Rated Wattage Performance Symbols: A: General B: Non flammable Z: Low noise Other: Temperature coefficient Tolerance Symbols: A: ±0.05% B: ±0.1% C: ±0.25% D: ±0.5% F: ±1% G: ±2% J: ±5% K: ±10% M: ±20% P: +5-15% Rated value, ohms: K: 1,000, M: 1,000,000 Material: CARBON..... Carbon MT-FILM..... Metal Film OXIDE-MT..... Oxide Metal Film SOLID..... Composition MT-GLAZE..... Metal Glaze WIRE WOUND... Wire Wound CERAMIC RES... Ceramic FUSIBLE RES.... Fusible			PARTS LIST FOR C21EF57B-00 OUT OF CIRCUIT BOARD PICTURE TUBE Q901 414 005 4404 CRT A51EBV12X09 COIL L901 645 002 5624 COIL,DEGAUSSING 645 002 5631 COIL,DEGAUSSING MISCELLANEOUS SP901 610 232 6086 SPEAKER 610 230 5234 SPEAKER W901 645 011 8838 CORD, POWER W902 610 024 2531 GROUNDING CONNECTOR ASSY,PWB,MAIN E8JC 1AA0B10E09500 TRANSISTOR Q1001 406 007 2106 TR JC546A 406 007 2007 TR JC546B 405 019 1909 TR 2SC536-E-NP 405 019 2708 TR 2SC536-F-NP 405 019 3804 TR 2SC536-G-NP Q1002 406 007 2106 TR JC546A 406 007 2007 TR JC546B 405 019 1909 TR 2SC536-E-NP 405 019 2708 TR 2SC536-F-NP 405 019 3804 TR 2SC536-G-NP Q1003 406 007 2106 TR JC546A 406 007 2007 TR JC546B 405 019 1909 TR 2SC536-E-NP 405 019 2708 TR 2SC536-F-NP 405 019 3804 TR 2SC536-G-NP Q1005 406 007 2106 TR JC546A 406 007 2007 TR JC546B 405 019 1909 TR 2SC536-E-NP 405 019 2708 TR 2SC536-F-NP 405 019 3804 TR 2SC536-G-NP Q1007 406 007 2106 TR JC546A 406 007 2007 TR JC546B 405 019 1909 TR 2SC536-E-NP 405 019 2708 TR 2SC536-F-NP 405 019 3804 TR 2SC536-G-NP Q101 405 013 3305 TR 2SC2216 (SAN) Q131 406 007 1901 TR JC556A 406 007 1802 TR JC556B		

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
Q134	405 004 4205	TR 2SA608-E-CTV-NP	Q711	405 004 4205	TR 2SA608-E-CTV-NP
	405 004 4809	TR 2SA608-F-CTV-NP		405 004 4809	TR 2SA608-F-CTV-NP
	405 028 7909	TR 2SA608-G-CTV-NP		405 028 7909	TR 2SA608-G-CTV-NP
	406 007 1901	TR JC556A		405 118 4207	TR PH2369
	406 007 1802	TR JC556B	Q712	406 007 2106	TR JC546A
Q152	405 004 4205	TR 2SA608-E-CTV-NP		406 007 2007	TR JC546B
	405 004 4809	TR 2SA608-F-CTV-NP		405 019 1909	TR 2SC536-E-NP
	405 028 7909	TR 2SA608-G-CTV-NP		405 019 2708	TR 2SC536-F-NP
	406 007 2106	TR JC546A		405 019 3804	TR 2SC536-G-NP
Q202	406 007 2007	TR JC546B	Q713	406 007 2106	TR JC546A
	405 019 1909	TR 2SC536-E-NP		406 007 2007	TR JC546B
	405 019 2708	TR 2SC536-F-NP		405 019 1909	TR 2SC536-E-NP
	405 019 3804	TR 2SC536-G-NP		405 019 2708	TR 2SC536-F-NP
	406 007 2106	TR JC546A		405 019 3804	TR 2SC536-G-NP
Q311	406 007 2007	TR JC546B	Q722	406 007 2106	TR JC546A
	405 019 1909	TR 2SC536-E-NP		406 007 2007	TR JC546B
	405 019 2708	TR 2SC536-F-NP		405 019 1909	TR 2SC536-E-NP
	405 019 3804	TR 2SC536-G-NP		405 019 2708	TR 2SC536-F-NP
	406 007 1901	TR JC556A		405 019 3804	TR 2SC536-G-NP
Q312	406 007 1802	TR JC556B	Q851	406 007 2106	TR JC546A
	405 004 4205	TR 2SA608-E-CTV-NP		406 007 2007	TR JC546B
	405 004 4809	TR 2SA608-F-CTV-NP		405 019 1909	TR 2SC536-E-NP
	405 028 7909	TR 2SA608-G-CTV-NP		405 019 2708	TR 2SC536-F-NP
	405 058 0208	TR 2SC3807-R-CTV-YA		405 019 3804	TR 2SC536-G-NP
Q313	405 022 8506	TR 2SD1710-CTV-YB	Q852	406 007 1901	TR JC556A
Q351	405 009 6907	TR 2SB985-S		406 007 1802	TR JC556B
Q352	405 009 7003	TR 2SB985-T		405 004 4205	TR 2SA608-E-CTV-NP
	406 007 2106	TR JC546A		405 004 4809	TR 2SA608-F-CTV-NP
	406 007 2007	TR JC546B		405 028 7909	TR 2SA608-G-CTV-NP
Q353	405 019 1909	TR 2SC536-E-NP	Q857	406 007 2106	TR JC546A
	405 019 2708	TR 2SC536-F-NP		406 007 2007	TR JC546B
	405 019 3804	TR 2SC536-G-NP		405 019 1909	TR 2SC536-E-NP
	406 007 2106	TR JC546A		405 019 2708	TR 2SC536-F-NP
	406 007 2007	TR JC546B		405 019 3804	TR 2SC536-G-NP
Q354	405 019 1909	TR 2SC536-E-NP	Q858	406 007 1901	TR JC556A
	405 019 2708	TR 2SC536-F-NP		406 007 1802	TR JC556B
	405 019 3804	TR 2SC536-G-NP		405 004 4205	TR 2SA608-E-CTV-NP
	405 008 4805	TR 2SB764-E		405 004 4809	TR 2SA608-F-CTV-NP
	406 007 2106	TR JC546A		405 028 7909	TR 2SA608-G-CTV-NP
Q371	406 007 2007	TR JC546B	Q881	406 007 2106	TR JC546A
Q372	405 019 1909	TR 2SC536-E-NP		406 007 2007	TR JC546B
	405 019 2708	TR 2SC536-F-NP		405 019 1909	TR 2SC536-E-NP
	405 019 3804	TR 2SC536-G-NP		405 019 2708	TR 2SC536-F-NP
	406 007 1901	TR JC556A		405 019 3804	TR 2SC536-G-NP
Q381	406 007 1802	TR JC556B	INTEGRATED CIRCUIT		
	405 004 4205	TR 2SA608-E-CTV-NP	IC1001	409 329 8900	IC SAA5254P/E
	405 004 4809	TR 2SA608-F-CTV-NP	IC1002	409 018 7603	IC LA7016
	405 028 7909	TR 2SA608-G-CTV-NP	IC101	409 309 6209	IC TDA8361/N3
	405 023 4903	TR 2SD400-D-MP	IC171	409 073 1509	IC AN5265
Q431	405 023 5009	TR 2SD400-E-MP	IC270	409 322 0505	IC TDA4662/V1
	405 023 5306	TR 2SD400-F-MP		409 291 0605	IC TDA4661/V2
	405 013 6801	TR 2SC2274-E	IC350	409 026 8609	IC L78M05-RA
	405 013 7006	TR 2SC2274-F	IC352	409 285 5203	IC L78M08-RA
	405 022 6809	TR 2SD1651-CTV-YB	IC451	409 183 5008	IC LA7832
Q436	405 019 3804	TR 2SC536-G-NP	IC701	410 223 9405	IC M37210M4-524SP
Q437	405 019 3804	TR 2SC536-G-NP	IC790	409 247 7702	IC ST24C02AB1
Q703	406 007 2106	TR JC546A		409 281 8307	IC 24C02A/P
	406 007 2007	TR JC546B		409 333 3700	IC 24LC02B/P
	405 019 1909	TR 2SC536-E-NP	CAPACITOR		
	405 019 2708	TR 2SC536-F-NP	C1001	403 166 6808	MT-POLYEST 0.1U J 63V
	405 019 3804	TR 2SC536-G-NP		403 237 8007	MT-COMPO 0.1U J 50V
Q708	406 007 1901	TR JC556A			
	406 007 1802	TR JC556B			

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
C1002	403 248 1608	ELECT 47U M 16V	C203	403 061 8303	POLYESTER 4700P K 50V
C1003	403 166 6808	MT-POLYEST 0.1U J 63V		403 179 1104	POLYESTER 4700P K 50V
	403 237 8007	MT-COMPO 0.1U J 50V	C204	403 270 2901	MT-POLYEST 0.1U K 63V
C1004	403 008 5501	CERAMIC 10P D 50V		403 237 8007	MT-COMPO 0.1U J 50V
C1005	403 012 4309	CERAMIC 15P J 50V	C205	403 270 2901	MT-POLYEST 0.1U K 63V
C1006	403 056 8103	POLYESTER 1000P K 50V		403 237 8007	MT-COMPO 0.1U J 50V
	403 179 3900	POLYESTER 1000P K 50V	C206	403 233 0807	ELECT 10U M 50V
C1007	403 166 6808	MT-POLYEST 0.1U J 63V	C207	403 248 2803	ELECT 2.2U M 50V
	403 237 8007	MT-COMPO 0.1U J 50V	C208	403 270 2901	MT-POLYEST 0.1U K 63V
C1008	403 166 6808	MT-POLYEST 0.1U J 63V		403 237 8007	MT-COMPO 0.1U J 50V
	403 237 8007	MT-COMPO 0.1U J 50V	C209	403 270 2901	MT-POLYEST 0.1U K 63V
C1009	403 166 6808	MT-POLYEST 0.1U J 63V		403 237 8007	MT-COMPO 0.1U J 50V
	403 237 8007	MT-COMPO 0.1U J 50V	C210	403 270 2901	MT-POLYEST 0.1U K 63V
C101	403 233 0302	ELECT 100U M 16V		403 237 8007	MT-COMPO 0.1U J 50V
C1010	403 166 6808	MT-POLYEST 0.1U J 63V	C211	403 270 3908	MT-POLYEST 0.47U K 63V
	403 237 8007	MT-COMPO 0.1U J 50V		403 256 0808	MT-COMPO 0.47U J 50V
C102	403 028 2009	CERAMIC 56P J 50V	C213	403 270 2901	MT-POLYEST 0.1U K 63V
C1020	403 248 1905	ELECT 10U M 16V		403 237 8007	MT-COMPO 0.1U J 50V
C1021	403 248 1905	ELECT 10U M 16V	C215	403 270 3908	MT-POLYEST 0.47U K 63V
C1025	403 069 8305	CERAMIC 0.01U Z 50V		403 256 0808	MT-COMPO 0.47U J 50V
C105	403 248 1400	ELECT 1U M 50V	C216	403 270 2901	MT-POLYEST 0.1U K 63V
C106	403 248 2001	ELECT 4.7U M 25V		403 237 8007	MT-COMPO 0.1U J 50V
C107	403 248 1608	ELECT 47U M 16V	C220	403 194 4609	ELECT 470U M 16V
C108	403 026 9703	CERAMIC 5P C 50V	C221	403 270 2901	MT-POLYEST 0.1U K 63V
C109	403 026 9703	CERAMIC 5P C 50V		403 237 8007	MT-COMPO 0.1U J 50V
C113	403 069 8305	CERAMIC 0.01U Z 50V	C222	403 270 2901	MT-POLYEST 0.1U K 63V
C114	403 069 8305	CERAMIC 0.01U Z 50V		403 237 8007	MT-COMPO 0.1U J 50V
C115	403 069 8305	CERAMIC 0.01U Z 50V	C231	403 194 2100	NP-ELECT 4.7U M 100V
C117	403 248 1608	ELECT 47U M 16V	C234	403 248 2803	ELECT 2.2U M 50V
C120	403 069 8305	CERAMIC 0.01U Z 50V	C240	403 069 8305	CERAMIC 0.01U Z 50V
C121	403 061 9805	POLYESTER 0.047U J 50V	C270	403 059 6205	POLYESTER 0.022U K 50V
	403 179 1005	POLYESTER 0.047U J 50V		403 179 2408	POLYESTER 0.022U K 50V
C122	403 270 2901	MT-POLYEST 0.1U K 63V	C271	403 069 0507	CERAMIC 1000P K 50V
	403 237 8007	MT-COMPO 0.1U J 50V	C272	403 069 0507	CERAMIC 1000P K 50V
C123	403 233 0807	ELECT 10U M 50V	C275	403 248 1905	ELECT 10U M 16V
C126	403 061 2400	POLYESTER 3900P K 50V	△C301	404 047 3602	MT-POLYEST 0.1U M 125V
	403 179 1401	POLYESTER 3900P K 50V		404 066 6707	MT-POLYEST 0.1U M 250V
C127	403 069 0507	CERAMIC 1000P K 50V		404 044 0901	MT-COMPO 0.1U M 250V
C128	403 248 2803	ELECT 2.2U M 50V	△C302	404 047 3602	MT-POLYEST 0.1U M 125V
C129	403 028 2009	CERAMIC 56P J 50V		404 066 6707	MT-POLYEST 0.1U M 250V
C130	403 069 8305	CERAMIC 0.01U Z 50V		404 044 0901	MT-COMPO 0.1U M 250V
C132	403 270 2901	MT-POLYEST 0.1U K 63V	C303	403 076 7100	CERAMIC 1000P M 1K
	403 237 8007	MT-COMPO 0.1U J 50V	C304	403 076 7100	CERAMIC 1000P M 1K
C134	403 069 0507	CERAMIC 1000P K 50V	C305	403 076 7100	CERAMIC 1000P M 1K
C146	403 270 2901	MT-POLYEST 0.1U K 63V	C306	403 076 7100	CERAMIC 1000P M 1K
	403 237 8007	MT-COMPO 0.1U J 50V	C307	404 038 1600	ELECT 100U M 400V
C153	403 011 3808	CERAMIC 120P J 50V		404 055 0907	ELECT 100U M 400V
C171	403 258 3302	ELECT 33U M 16V	C314	403 270 2901	MT-POLYEST 0.1U K 63V
C172	403 270 3908	MT-POLYEST 0.47U K 63V		403 237 8007	MT-COMPO 0.1U J 50V
	403 256 0808	MT-COMPO 0.47U J 50V	C315	403 058 2604	POLYESTER 0.015U J 50V
C173	403 056 8103	POLYESTER 1000P K 50V		403 179 3207	POLYESTER 0.015U J 50V
	403 179 3900	POLYESTER 1000P K 50V	C316	403 165 8407	CERAMIC 680P K 2K
C175	403 248 1905	ELECT 10U M 16V		403 186 1104	CERAMIC 680P K 2K
C176	403 248 1905	ELECT 10U M 16V	C317	403 059 6205	POLYESTER 0.022U K 50V
C180	403 270 2901	MT-POLYEST 0.1U K 63V		403 179 2408	POLYESTER 0.022U K 50V
	403 237 8007	MT-COMPO 0.1U J 50V	△C331	404 060 6505	CERAMIC 2200P M 400V
C181	403 218 8101	ELECT 1000U M 25V		404 060 6604	CERAMIC 2200P M 400V
C182	403 086 2300	NP-ELECT 1U M 50V	C351	403 165 6106	CERAMIC 470P K 1K
C185	403 199 9708	ELECT 470U M 25V		403 186 2903	CERAMIC 470P K 1K
C188	403 233 1507	ELECT 4.7U M 50V	C352	403 165 8605	CERAMIC 470P K 2K
C201	403 014 0200	CERAMIC 18P J 50V		403 232 1805	CERAMIC 470P K 2K
C202	403 270 2901	MT-POLYEST 0.1U K 63V	C354	403 186 3108	CERAMIC 390P K 1K
	403 237 8007	MT-COMPO 0.1U J 50V	C361	404 042 4505	ELECT 220U M 160V

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
C362	403 281 1108	ELECT 22U M 250V	C721	403 270 2901	MT-POLYEST 0.1U K 63V
C363	403 148 2002	ELECT 470U M 35V		403 237 8007	MT-COMPO 0.1U J 50V
C364	403 148 0404	ELECT 1000U M 25V	C722	403 248 1608	ELECT 47U M 16V
	403 134 5307	ELECT 1000U M 25V	C723	403 026 0700	CERAMIC 47P J 50V
C365	403 148 0404	ELECT 1000U M 25V	C724	403 026 0700	CERAMIC 47P J 50V
	403 134 5307	ELECT 1000U M 25V	C725	403 069 8305	CERAMIC 0.01U Z 50V
C371	403 201 5001	ELECT 330U M 16V	C727	403 270 2901	MT-POLYEST 0.1U K 63V
C372	403 194 4609	ELECT 470U M 16V		403 237 8007	MT-COMPO 0.1U J 50V
C373	403 248 1400	ELECT 1U M 50V	C729	403 248 1905	ELECT 10U M 16V
C381	403 248 1905	ELECT 10U M 16V	C741	403 270 3403	MT-POLYEST 0.22U K 63V
C383	403 244 1206	ELECT 100U M 10V		403 237 7901	MT-COMPO 0.22U J 50V
C401	403 270 2901	MT-POLYEST 0.1U K 63V	C742	403 270 2901	MT-POLYEST 0.1U K 63V
	403 237 8007	MT-COMPO 0.1U J 50V		403 237 8007	MT-COMPO 0.1U J 50V
C402	403 061 8303	POLYESTER 4700P K 50V	C744	403 068 9006	CERAMIC 100P K 50V
	403 179 1104	POLYESTER 4700P K 50V	C746	403 026 0809	CERAMIC 47P J 50V
C403	403 061 8303	POLYESTER 4700P K 50V	C751	403 014 0200	CERAMIC 18P J 50V
	403 179 1104	POLYESTER 4700P K 50V	C752	403 014 0200	CERAMIC 18P J 50V
C404	403 086 2300	NP-ELECT 1U M 50V	C854	403 270 3908	MT-POLYEST 0.47U K 63V
C405	403 060 0704	POLYESTER 2700P K 50V		403 256 0808	MT-COMPO 0.47U J 50V
	403 179 2200	POLYESTER 2700P K 50V	C855	403 069 8305	CERAMIC 0.01U Z 50V
C406	403 059 6205	POLYESTER 0.022U K 50V	C856	403 248 1905	ELECT 10U M 16V
	403 179 2408	POLYESTER 0.022U K 50V	C859	403 068 9006	CERAMIC 100P K 50V
C407	403 233 0302	ELECT 100U M 16V	C881	403 270 2901	MT-POLYEST 0.1U K 63V
C410	403 056 9704	POLYESTER 0.01U J 50V		403 237 8007	MT-COMPO 0.1U J 50V
	403 178 9309	POLYESTER 0.01U J 50V	RESISTOR		
△C420	404 064 4200	MT-POLYPRO 8200P J 1.5K	R1001	401 026 1307	CARBON 27K JA 1/6W
	404 046 8400	MT-POLYPRO 8200P J 1.5K	R1002	401 027 3003	CARBON 56K JA 1/6W
C421	403 218 3106	ELECT 1000U M 16V	R1003	401 026 4308	CARBON 3.3K JA 1/6W
C422	403 082 8405	POLYPRO 0.22U J 200V	R1005	401 027 6608	CARBON 75 JA 1/6W
C426	403 066 6106	MT-POLYEST 0.47U J 250V	R1008	401 027 6608	CARBON 75 JA 1/6W
C432	403 075 7101	CERAMIC 1000P K 500V	R101	401 026 9303	CARBON 47 JA 1/6W
C433	403 076 3102	CERAMIC 3900P K 500V	R1011	401 027 6608	CARBON 75 JA 1/6W
C434	403 229 1207	ELECT 47U M 35V	R1012	401 025 7805	CARBON 2.2K JA 1/6W
△C437	403 165 7301	CERAMIC 330P K 3K	R1013	401 024 9305	CARBON 1.2K JA 1/6W
	403 186 0107	CERAMIC 330P K 3K	R1014	401 026 4308	CARBON 3.3K JA 1/6W
△C441	403 082 7804	POLYPRO 0.18U J 200V	R1015	401 027 5908	CARBON 68K JA 1/6W
△C442	403 082 8009	POLYPRO 0.2U J 200V	R1016	401 026 1307	CARBON 27K JA 1/6W
C451	403 210 5504	ELECT 470U M 35V	R1018	401 024 7400	CARBON 10K JA 1/6W
C452	403 217 1103	ELECT 220U M 35V	R1019	401 027 8602	CARBON 8.2K JA 1/6W
C453	403 023 9706	CERAMIC 39P J 50V	R1020	401 024 6700	CARBON 100 JA 1/6W
C454	403 069 8305	CERAMIC 0.01U Z 50V	R1021	401 024 6700	CARBON 100 JA 1/6W
C455	403 076 4901	CERAMIC 560P K 500V	R1022	401 024 6700	CARBON 100 JA 1/6W
C456	403 233 0807	ELECT 10U M 50V	R1023	401 026 9600	CARBON 470 JA 1/6W
C459	403 065 9801	MT-POLYEST 0.22U K 100V	R1024	401 026 9600	CARBON 470 JA 1/6W
	403 188 0907	MT-POLYEST 0.22U K 100V	R1029A	401 025 8208	CARBON 22K JA 1/6W
C461	403 209 7205	ELECT 2200U M 25V	R103	401 024 6700	CARBON 100 JA 1/6W
C463	403 064 8102	POLYESTER 0.047U K 100V	R1030	401 025 8208	CARBON 22K JA 1/6W
	403 277 0207	POLYESTER 0.047U K 100V	R104	401 027 2600	CARBON 5.6K JA 1/6W
C469	403 233 0807	ELECT 10U M 50V	R105	401 024 7004	CARBON 1K JA 1/6W
C701	403 248 2001	ELECT 4.7U M 25V	R106	401 025 7409	CARBON 220 JA 1/6W
C703	403 018 6208	CERAMIC 220P J 50V	R107	401 026 0409	CARBON 27 JA 1/6W
C704	403 068 9006	CERAMIC 100P K 50V	R121	401 027 5908	CARBON 68K JA 1/6W
C705	403 068 9006	CERAMIC 100P K 50V	R123	401 025 8703	CARBON 220K JA 1/6W
C706	403 068 9006	CERAMIC 100P K 50V	R124	401 027 5502	CARBON 6.8K JA 1/6W
C707	403 068 9006	CERAMIC 100P K 50V	R125	401 025 3807	CARBON 180 JA 1/6W
C709	403 248 1400	ELECT 1U M 50V	R126	401 027 2600	CARBON 5.6K JA 1/6W
C711	403 248 2001	ELECT 4.7U M 25V	R127	401 024 6700	CARBON 100 JA 1/6W
C712	403 248 1400	ELECT 1U M 50V	R131	401 027 5502	CARBON 6.8K JA 1/6W
C713	403 248 1400	ELECT 1U M 50V	R132	401 027 0309	CARBON 47K JA 1/6W
C716	403 233 1507	ELECT 4.7U M 50V	R133	401 025 3807	CARBON 180 JA 1/6W
C717	403 068 9006	CERAMIC 100P K 50V	R134	401 024 7004	CARBON 1K JA 1/6W
C718	403 071 5606	CERAMIC 220P K 50V	R135	401 024 7004	CARBON 1K JA 1/6W
C719	403 069 0507	CERAMIC 1000P K 50V			

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
R138	401 026 6609	CARBON 390 JA 1/6W	R374	401 025 8703	CARBON 220K JA 1/6W
R143	401 026 4308	CARBON 3.3K JA 1/6W	R375	401 025 8208	CARBON 22K JA 1/6W
R151	401 024 7004	CARBON 1K JA 1/6W	R376	401 024 7400	CARBON 10K JA 1/6W
R153	401 026 3905	CARBON 330 JA 1/6W	R382	401 058 1108	OXIDE-MT 10 JA 1W
R156	401 027 5205	CARBON 680 JA 1/6W	R383	401 025 3807	CARBON 180 JA 1/6W
R157	401 026 9303	CARBON 47 JA 1/6W	R401	401 024 6700	CARBON 100 JA 1/6W
R165	401 027 2600	CARBON 5.6K JA 1/6W	R402A	401 024 8001	CARBON 1M JA 1/6W
R166	401 024 7400	CARBON 10K JA 1/6W	R403	401 024 6700	CARBON 100 JA 1/6W
R170	401 025 1902	CARBON 15K JA 1/6W	R404	401 025 8208	CARBON 22K JA 1/6W
R171	401 026 3707	CARBON 33 JA 1/6W	R405	401 024 6700	CARBON 100 JA 1/6W
R172	401 027 2303	CARBON 560 JA 1/6W	R406	401 026 7606	CARBON 390K JA 1/6W
R174	401 024 7400	CARBON 10K JA 1/6W	R407	401 025 8208	CARBON 22K JA 1/6W
R183	401 024 7004	CARBON 1K JA 1/6W	R408	401 024 6700	CARBON 100 JA 1/6W
R184	401 026 7408	CARBON 39K JA 1/6W	R409	401 026 9907	CARBON 4.7K JA 1/6W
R201	401 027 0309	CARBON 47K JA 1/6W	R410	401 025 8208	CARBON 22K JA 1/6W
R202	401 024 7707	CARBON 100K JA 1/6W	R412	401 027 0309	CARBON 47K JA 1/6W
R203	401 024 6700	CARBON 100 JA 1/6W	R413	401 026 9907	CARBON 4.7K JA 1/6W
R204	401 024 6700	CARBON 100 JA 1/6W	R414	401 026 1000	CARBON 2.7K JA 1/6W
R205	401 024 6700	CARBON 100 JA 1/6W	R415	401 026 4605	CARBON 33K JA 1/6W
R213	401 025 8208	CARBON 22K JA 1/6W	R416	401 024 7400	CARBON 10K JA 1/6W
R214	401 025 1902	CARBON 15K JA 1/6W	R417	401 025 8208	CARBON 22K JA 1/6W
R215	401 025 4200	CARBON 1.8K JA 1/6W	R418	401 026 1307	CARBON 27K JA 1/6W
R219	401 019 1000	CARBON 390 JA 1/4W	R422	402 069 8704	WIRE WOUND 8.2 KA 7W
R231	401 014 6109	CARBON 150K JA 1/4W	R432	401 024 7004	CARBON 1K JA 1/6W
R232	401 012 5708	CARBON 1K JA 1/4W	R433	401 010 3102	CARBON 470 JA 1/2W
R235	401 026 7408	CARBON 39K JA 1/6W	R434	401 009 9306	CARBON 390 JA 1/2W
R236	401 026 1000	CARBON 2.7K JA 1/6W	R436	401 014 5201	CARBON 15K JA 1/4W
R237	401 025 7805	CARBON 2.2K JA 1/6W	R441	401 058 3706	OXIDE-MT 1K JA 1W
R274	401 024 7400	CARBON 10K JA 1/6W	R448	401 008 0908	CARBON 180 JA 1/2W
R275	401 025 7409	CARBON 220 JA 1/6W	R449	401 006 9309	CARBON 10 JA 1/2W
R280	401 025 1902	CARBON 15K JA 1/6W	R451	401 026 8108	CARBON 4.7 JA 1/6W
R281	401 027 5502	CARBON 6.8K JA 1/6W	R452	401 027 8602	CARBON 8.2K JA 1/6W
<u>Δ</u> R301	401 008 8607	CARBON 220K JA 1/2W	R453	401 024 7004	CARBON 1K JA 1/6W
R302	402 060 8109	WIRE WOUND 3.9 KA 5W	R454	401 025 7409	CARBON 220 JA 1/6W
R311	401 027 2600	CARBON 5.6K JA 1/6W	R455	401 025 7805	CARBON 2.2K JA 1/6W
R315	401 025 8208	CARBON 22K JA 1/6W	R456	401 020 2003	CARBON 4.7K JA 1/4W
R317	401 024 7004	CARBON 1K JA 1/6W	R457	401 026 9907	CARBON 4.7K JA 1/6W
R319	401 016 1508	CARBON 22 JA 1/4W	R458	645 008 5642	INDUCTOR, 3.3U K
R320	401 007 5805	CARBON 120K JA 1/2W	R459	401 057 7408	OXIDE-MT 0.82 JA 1W
R321	401 007 5805	CARBON 120K JA 1/2W	R460	401 009 9306	CARBON 390 JA 1/2W
R322	401 014 5201	CARBON 15K JA 1/4W	R467	401 063 6303	OXIDE-MT 820 JA 1W
R323	401 025 7805	CARBON 2.2K JA 1/6W	R475	401 009 5803	CARBON 330 JA 1/2W
R324	401 069 1708	OXIDE-MT 68 JA 2W	R481	401 064 5602	OXIDE-MT 1.8 JA 2W
R325	401 069 1708	OXIDE-MT 68 JA 2W	R700	401 024 7400	CARBON 10K JA 1/6W
R326	401 018 3401	CARBON 3.3K GA 1/4W	R701	401 024 7400	CARBON 10K JA 1/6W
<u>Δ</u> R331	402 000 8305	SOLID 5.6M KA 1/2W	R702	401 026 4308	CARBON 3.3K JA 1/6W
<u>Δ</u> R332	402 000 8305	SOLID 5.6M KA 1/2W	R703	401 024 7400	CARBON 10K JA 1/6W
R350	401 012 8105	CARBON 100K JA 1/4W	R707	401 024 6700	CARBON 100 JA 1/6W
R352	401 066 9103	OXIDE-MT 27 JA 2W	R708	401 024 9701	CARBON 12K JA 1/6W
R353	401 026 9907	CARBON 4.7K JA 1/6W	R709	401 027 9005	CARBON 82K JA 1/6W
R354	401 014 6109	CARBON 150K JA 1/4W	R710	401 024 7004	CARBON 1K JA 1/6W
R355	401 060 9307	OXIDE-MT 27K JA 1W	R711	401 026 4308	CARBON 3.3K JA 1/6W
R356	401 013 6407	CARBON 12K JA 1/4W	R712	401 025 4200	CARBON 1.8K JA 1/6W
R360	401 059 3903	OXIDE-MT 1.5K JA 1W	R713	401 025 1902	CARBON 15K JA 1/6W
R362	401 068 6209	OXIDE-MT 5.6 JA 2W	R715	401 024 7400	CARBON 10K JA 1/6W
R364	401 012 7009	CARBON 10K JA 1/4W	R716	401 026 4605	CARBON 33K JA 1/6W
R365	401 019 1901	CARBON 3.9K JA 1/4W	R717	401 024 9305	CARBON 1.2K JA 1/6W
R366	401 012 7009	CARBON 10K JA 1/4W	R718	401 026 7002	CARBON 3.9K JA 1/6W
R367	401 013 5301	CARBON 1.2K JA 1/4W	R721	401 026 4605	CARBON 33K JA 1/6W
R370	401 027 8602	CARBON 8.2K JA 1/6W	R723	401 024 7004	CARBON 1K JA 1/6W
R371	401 024 9701	CARBON 12K JA 1/6W	R724	401 024 7400	CARBON 10K JA 1/6W
R372	401 026 7606	CARBON 390K JA 1/6W	R726	401 027 2600	CARBON 5.6K JA 1/6W
R373	401 027 3201	CARBON 560K JA 1/6W	R733	401 024 9701	CARBON 12K JA 1/6W

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
R734	401 026 9907	CARBON 4.7K JA 1/6W	R870	401 024 7400	CARBON 10K JA 1/6W
R735	401 027 8602	CARBON 8.2K JA 1/6W	R881	401 024 7004	CARBON 1K JA 1/6W
R736	401 025 1605	CARBON 1.5K JA 1/6W	R882	401 024 9305	CARBON 1.2K JA 1/6W
R737	401 024 9701	CARBON 12K JA 1/6W	R883	401 026 4308	CARBON 3.3K JA 1/6W
R738	401 024 9701	CARBON 12K JA 1/6W	R885	401 024 9305	CARBON 1.2K JA 1/6W
R740	401 027 9005	CARBON 82K JA 1/6W	R887	401 024 7004	CARBON 1K JA 1/6W
R741	401 024 7400	CARBON 10K JA 1/6W	VARIABLE RESISTOR		
R742	401 024 6700	CARBON 100 JA 1/6W	VR120	645 006 5422	VR, SEMI, 10K N
R743	401 025 1308	CARBON 150 JA 1/6W		610 239 7567	VR B-10K
R744	401 026 9907	CARBON 4.7K JA 1/6W	VR351	645 006 5514	VR, SEMI, 2.2K N
R745	401 025 1308	CARBON 150 JA 1/6W		610 239 7581	VR B-2K
R746	401 026 9907	CARBON 4.7K JA 1/6W	VR401	645 006 5422	VR, SEMI, 10K N
R747	401 024 6700	CARBON 100 JA 1/6W		610 239 7567	VR B-10K
R748	401 024 6700	CARBON 100 JA 1/6W	VR431	645 006 5408	VR, SEMI, 100 N
R749	401 026 7002	CARBON 3.9K JA 1/6W		610 232 7908	VR, SEMI, 100 N
R750	401 026 4308	CARBON 3.3K JA 1/6W	TRANSFORMER		
R758	401 027 2600	CARBON 5.6K JA 1/6W	T101	610 037 4508	S COIL
R759	401 025 7805	CARBON 2.2K JA 1/6W	<u>A</u> T311	645 007 7487	TRANS, POWER, PULSE
R761	401 065 8503	OXIDE-MT 15K JA 2W		645 009 0332	TRANS, POWER, PULSE
R762	401 024 7400	CARBON 10K JA 1/6W	T431	610 000 1053	DRIVE TRANS
R763	401 025 1902	CARBON 15K JA 1/6W		610 000 1060	DRIVE TRANS
R764	401 025 4903	CARBON 180K JA 1/6W	<u>A</u> T471	610 233 6078	FBT
R766	401 027 2600	CARBON 5.6K JA 1/6W	COIL		
R767	401 026 9907	CARBON 4.7K JA 1/6W	L1002	645 008 2849	INDUCTOR, 3.9U K
R768	401 020 0801	CARBON 470 JA 1/4W	L103	645 008 2863	INDUCTOR, 4.7U K
R774	401 027 0309	CARBON 47K JA 1/6W	L135	645 003 9751	INDUCTOR, 18U K
R775	401 027 0309	CARBON 47K JA 1/6W	L152	645 008 2863	INDUCTOR, 4.7U K
R776	401 027 0309	CARBON 47K JA 1/6W	L201	645 008 2863	INDUCTOR, 4.7U K
R780	401 024 7707	CARBON 100K JA 1/6W	L202	645 008 2863	INDUCTOR, 4.7U K
R781	401 025 2305	CARBON 150K JA 1/6W	L203	645 008 2863	INDUCTOR, 4.7U K
R787	401 024 7400	CARBON 10K JA 1/6W	L230	610 037 4522	S COIL
R791	401 026 6609	CARBON 390 JA 1/6W	L280	645 001 4727	INDUCTOR, 10U K
R792	401 025 8208	CARBON 22K JA 1/6W	<u>A</u> L301	610 221 6912	LINE FILTER
R793	401 026 6609	CARBON 390 JA 1/6W	L420	610 032 0703	INDUCTOR
R794	401 025 8208	CARBON 22K JA 1/6W	L441	610 000 0605	LINEARITY COIL
R795	401 026 6609	CARBON 390 JA 1/6W		610 210 8071	LINEARITY COIL
R796	401 025 1605	CARBON 1.5K JA 1/6W	L442	610 000 0278	COIL
R797	401 024 7400	CARBON 10K JA 1/6W		610 205 1117	COIL
R802	401 026 9600	CARBON 470 JA 1/6W	L451	610 210 3908	PEAKING COIL 33UHK
R810	401 024 7400	CARBON 10K JA 1/6W		645 001 5748	INDUCTOR, 33U K
R811	401 025 1308	CARBON 150 JA 1/6W	L702	645 008 0203	INDUCTOR, 5.6U K
R812	401 025 1605	CARBON 1.5K JA 1/6W	L703	645 008 0203	INDUCTOR, 5.6U K
R813	401 026 9907	CARBON 4.7K JA 1/6W	L704	645 003 9782	INDUCTOR, 22U K
R814	401 026 9907	CARBON 4.7K JA 1/6W	L705	645 011 0221	INDUCTOR, 1.5U K
R815	401 027 5502	CARBON 6.8K JA 1/6W	L706	645 001 4727	INDUCTOR, 10U K
R816	401 025 1902	CARBON 15K JA 1/6W	L852	645 001 4567	INDUCTOR, 10U K
R817	401 027 0309	CARBON 47K JA 1/6W	DIODE		
R850	401 024 7707	CARBON 100K JA 1/6W	D1001	407 151 8402	ZENER DIODE UZ-5.1BCB
R851	401 024 9701	CARBON 12K JA 1/6W	D1002	408 007 8607	DIODE 1N4148
R852	401 024 9701	CARBON 12K JA 1/6W		407 013 1206	DIODE 1S1555
R853	401 027 2600	CARBON 5.6K JA 1/6W	D123	407 012 4208	DIODE 1SS131
R854	401 027 2303	CARBON 560 JA 1/6W		407 012 6004	DIODE 1SS178
R855	401 027 6608	CARBON 75 JA 1/6W	D171	408 007 8607	DIODE 1N4148
R856	401 026 7408	CARBON 39K JA 1/6W		407 013 1206	DIODE 1S1555
R857	401 026 1307	CARBON 27K JA 1/6W	D172	408 007 8607	DIODE 1N4148
R858	401 027 6608	CARBON 75 JA 1/6W		407 013 1206	DIODE 1S1555
R859	401 027 6608	CARBON 75 JA 1/6W	D201	407 075 9905	ZENER DIODE EQA03-11A
R860	401 027 6608	CARBON 75 JA 1/6W		407 063 8309	ZENER DIODE MTZJ11C
R861	401 027 6608	CARBON 75 JA 1/6W	D202	407 075 9905	ZENER DIODE EQA03-11A
R862	401 027 6608	CARBON 75 JA 1/6W			
R866	401 026 9907	CARBON 4.7K JA 1/6W			
R867	401 026 9600	CARBON 470 JA 1/6W			
R868	401 024 7400	CARBON 10K JA 1/6W			

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
D203	407 063 8309	ZENER DIODE MTZJ11C	D371	407 151 8600	ZENER DIODE UZ-6.2BCC
	407 075 9905	ZENER DIODE EQA03-11A		407 164 9908	ZENER DIODE UZ-6.8BCA
	407 063 8309	ZENER DIODE MTZJ11C	D372	408 007 8607	DIODE 1N4148
D231	407 005 4505	DIODE DS442X		407 013 1206	DIODE 1S1555
	407 013 1008	DIODE 1S1553	D381	407 127 3400	ZD BZX55C12-GPS-26
	407 013 4306	DIODE 1S2076A		407 163 9206	ZENER DIODE UZ-13BCA
	407 013 6508	DIODE 1S2471		407 164 4705	ZENER DIODE UZ-13BCB
D232	408 007 8607	DIODE 1N4148	D401	407 075 9905	ZENER DIODE EQA03-11A
	407 013 1206	DIODE 1S1555		407 063 8309	ZENER DIODE MTZJ11C
D233	408 007 8607	DIODE 1N4148	D431	407 163 9909	ZENER DIODE UZ-9.1BCA
	407 013 1008	DIODE 1S1553		407 162 2703	ZENER DIODE UZ-9.1BCB
D234	408 007 8607	DIODE 1N4148	D432	407 007 6606	DIODE ES1
	407 013 1206	DIODE 1S1555	D451	407 005 7308	DIODE EM01Z
D274	407 012 4406	DIODE 1SS133		408 009 9008	DIODE BYD33D
	407 012 5809	DIODE 1SS176	D453	408 007 8607	DIODE 1N4148
D275	407 163 8209	ZENER DIODE UZ-5.1BCC		407 013 1206	DIODE 1S1555
D303	407 006 6300	DIODE ERC05-10B	D471	407 118 2207	ZENER DIODE 1Z75
	407 009 6901	DIODE RM11C	D702	407 158 9204	LED SPR-39MVWF
D304	407 006 6300	DIODE ERC05-10B	D703	407 055 7907	ZENER DIODE RD3.6EL
	407 009 6901	DIODE RM11C	D704	409 013 0104	IC HZT33
D305	407 006 6300	DIODE ERC05-10B		409 026 8005	IC L5630
	407 009 6901	DIODE RM11C		409 057 5103	IC UPC574J
D306	407 006 6300	DIODE ERC05-10B	D705	407 075 9905	ZENER DIODE EQA03-11A
	407 009 6901	DIODE RM11C		407 063 8309	ZENER DIODE MTZJ11C
D314	407 005 4505	DIODE DS442X	D712	408 007 8607	DIODE 1N4148
	407 013 1008	DIODE 1S1553		407 013 1206	DIODE 1S1555
	407 013 4306	DIODE 1S2076A	D721	407 012 4406	DIODE 1SS133
	407 013 6508	DIODE 1S2471		407 012 5809	DIODE 1SS176
△D315	407 105 8700	PHOTO COUPLE PC113B	D862	407 012 4406	DIODE 1SS133
	408 009 8407	PHOTO COUPLE CNY17F-3OPT6		407 012 5809	DIODE 1SS176
D316	407 005 4505	DIODE DS442X	MISCELLANEOUS		
	407 013 1008	DIODE 1S1553	△F301	423 022 2102	FUSE 250V 4A
	407 013 4306	DIODE 1S2076A	A101	645 009 5993	TUNER,U
	407 013 6508	DIODE 1S2471	A701	645 007 1546	UNIT,REMOCON RECEIVER
D317	407 007 6606	DIODE ES1		610 224 5806	RC PREAMP 409-1L
	407 007 6903	DIODE ES1Z	K801	610 009 8275	SOCKET 21P
	408 009 9008	DIODE BYD33D		610 218 6673	SOCKET 21P
D318	407 005 4505	DIODE DS442X		610 225 2361	SOCKET 21P
	407 013 1008	DIODE 1S1553	△PS301	408 003 6805	THERMISTOR 902P44E180MR14
	407 013 4306	DIODE 1S2076A		408 015 1904	THERMISTOR PA3A5180B270
	407 013 6508	DIODE 1S2471		408 000 3906	TH PTH451A112BF180M270
D319	407 151 9003	ZENER DIODE UZ-7.5BCC	SW220	610 011 2728	SWITCH,LEVER 1P-3T
	407 151 9102	ZENER DIODE UZ-8.2BCA	△SW301	645 003 6811	SWITCH,PUSH POWER 2P-2T
D351	407 007 7702	DIODE EU2A	SW451	610 011 2728	SWITCH,LEVER 1P-3T
D352	407 007 7504	DIODE EU1C	SW701	610 011 2698	SWITCH,PUSH
D353	407 007 7603	DIODE EU2	SW702	610 011 2698	SWITCH,PUSH
	408 007 2506	DIODE BYW32	SW703	610 011 2698	SWITCH,PUSH
D354	407 007 7603	DIODE EU2	SW704	610 011 2698	SWITCH,PUSH
	408 007 2506	DIODE BYW32	SW705	610 011 2698	SWITCH,PUSH
D355	407 007 7603	DIODE EU2	SW706	610 011 2698	SWITCH,PUSH
	408 007 2506	DIODE BYW32	X1001	610 249 6024	CRYSTAL OSCILLATOR
D361	407 151 8600	ZENER DIODE UZ-6.2BCC	X101	421 004 7404	SAW F TSF5343
	407 164 9908	ZENER DIODE UZ-6.8BCA	X131	645 001 7902	TRAP,CERAMIC 6.0MHZ
D362	408 007 8607	DIODE 1N4148		610 015 2885	TRAP,CERAMIC 6.0MHZ
	407 013 1206	DIODE 1S1555	X151	645 003 2813	CERAMIC FILTER
D364	408 007 8607	DIODE 1N4148	X201	610 239 3347	CRYSTAL OSCILLATOR
	407 013 1206	DIODE 1S1555	X701	645 009 8345	OSC,CRYSTAL 8.000MHZ
D365	408 007 8607	DIODE 1N4148			
	407 013 1206	DIODE 1S1555			
D366	408 007 8607	DIODE 1N4148			
	407 013 1206	DIODE 1S1555			
D370	408 007 8607	DIODE 1N4148			
	407 013 1206	DIODE 1S1555			

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
ASSY,PWB,CRT E8JE 1AA0B10E13000			VR611	645 003 5722	VR,SEMI,4.7K N
			VR612	645 003 5647	VR,SEMI,1K N
			VR621	645 003 5722	VR,SEMI,4.7K N
TRANSISTOR			COIL		
Q601	405 041 6507	TR 2SC2621-D-RA	L601	645 008 0012	INDUCTOR,330U K
	405 041 6705	TR 2SC2621-E-RA	L611	645 008 0012	INDUCTOR,330U K
	405 066 9903	TR 2SC2688(1)-K	L621	645 008 0012	INDUCTOR,330U K
	405 067 0008	TR 2SC2688(1)-L	DIODE		
	405 067 0107	TR 2SC2688(1)-M	D601	407 013 1206	DIODE 1S1555
Q611	405 041 6507	TR 2SC2621-D-RA	D611	407 013 1206	DIODE 1S1555
	405 041 6705	TR 2SC2621-E-RA	D621	407 013 1206	DIODE 1S1555
	405 066 9903	TR 2SC2688(1)-K	D651	407 013 1206	DIODE 1S1555
	405 067 0008	TR 2SC2688(1)-L	MISCELLANEOUS		
	405 067 0107	TR 2SC2688(1)-M	K6M	645 008 4058	TERMINAL, PLUG
Q621	405 041 6507	TR 2SC2621-D-RA	K6P	645 004 2911	PLUG,5P
	405 041 6705	TR 2SC2621-E-RA	K6Q	645 004 2898	PLUG,3P
	405 066 9903	TR 2SC2688(1)-K	△K601-B	610 233 7990	CRT SOCKET
	405 067 0008	TR 2SC2688(1)-L			
	405 067 0107	TR 2SC2688(1)-M			
Q640	406 007 1901	TR JC556A			
	406 007 1802	TR JC556B			
	405 004 4205	TR 2SA608-E-CTV-NP			
	405 004 4809	TR 2SA608-F-CTV-NP			
	405 028 7909	TR 2SA608-G-CTV-NP			
Q651	406 007 1901	TR JC556A			
	406 007 1802	TR JC556B			
	405 004 4205	TR 2SA608-E-CTV-NP			
	405 004 4809	TR 2SA608-F-CTV-NP			
	405 028 7909	TR 2SA608-G-CTV-NP			
CAPACITOR					
C601	403 073 6403	CERAMIC 470P K 50V			
C611	403 073 6403	CERAMIC 470P K 50V			
C621	403 073 6403	CERAMIC 470P K 50V			
C631	403 077 2708	CERAMIC 1000P P 2K			
C651	403 201 5001	ELECT 330U M 16V			
RESISTOR					
R601	401 018 2800	CARBON 330 JA 1/4W			
R602	401 019 1901	CARBON 3.9K JA 1/4W			
R603	401 012 5708	CARBON 1K JA 1/4W			
R604	401 065 4604	OXIDE-MT 12K JA 2W			
R605	401 009 6602	CARBON 3.3K JA 1/2W			
R611	401 018 2800	CARBON 330 JA 1/4W			
R612	401 019 1901	CARBON 3.9K JA 1/4W			
R613	401 016 3809	CARBON 2.2K JA 1/4W			
R614	401 065 4604	OXIDE-MT 12K JA 2W			
R615-B	401 009 6602	CARBON 3.3K JA 1/2W			
R621	401 018 2800	CARBON 330 JA 1/4W			
R622	401 019 1901	CARBON 3.9K JA 1/4W			
R623	401 015 2704	CARBON 1.8K JA 1/4W			
R624	401 065 4604	OXIDE-MT 12K JA 2W			
R625-B	401 009 6602	CARBON 3.3K JA 1/2W			
R627	401 020 0801	CARBON 470 JA 1/4W			
R641	401 020 2003	CARBON 4.7K JA 1/4W			
R642	401 018 3807	CARBON 3.3K JA 1/4W			
R644	401 017 0807	CARBON 270 JA 1/4W			
R652	401 012 7009	CARBON 10K JA 1/4W			
R653	401 012 7009	CARBON 10K JA 1/4W			
VARIABLE RESISTOR					
VR601	645 003 5722	VR,SEMI,4.7K N			
VR602	645 003 5647	VR,SEMI,1K N			

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
PARTS LIST FOR C21EF50B-00					
OUT OF CIRCUIT BOARD					
PICTURE TUBE					
△Q901	414 005 4404	CRT A51EBV12X09			
COIL					
△L901	645 002 5624	COIL, DEGAUSSING			
	645 002 5631	COIL, DEGAUSSING			
MISCELLANEOUS					
SP901	610 232 6086	SPEAKER			
	610 230 5234	SPEAKER			
△W901	645 011 8838	CORD, POWER			
W902	610 024 2531	GROUNDING CONNECTOR			
ASSY,PWB,MAIN E8JA					
1AA0B10E095G0					
TRANSISTOR					
Q101	405 013 3305	TR 2SC2216 (SAN)	Q371	406 007 2106	TR JC546A
Q131	406 007 1901	TR JC556A		406 007 2007	TR JC546B
	406 007 1802	TR JC556B		405 019 1909	TR 2SC536-E-NP
	405 004 4205	TR 2SA608-E-CTV-NP		405 019 2708	TR 2SC536-F-NP
	405 004 4809	TR 2SA608-F-CTV-NP		405 019 3804	TR 2SC536-G-NP
	405 028 7909	TR 2SA608-G-CTV-NP	Q372	406 007 1901	TR JC556A
Q134	406 007 1901	TR JC556A		406 007 1802	TR JC556B
	406 007 1802	TR JC556B		405 004 4205	TR 2SA608-E-CTV-NP
	405 004 4205	TR 2SA608-E-CTV-NP		405 004 4809	TR 2SA608-F-CTV-NP
	405 004 4809	TR 2SA608-F-CTV-NP		405 028 7909	TR 2SA608-G-CTV-NP
	405 028 7909	TR 2SA608-G-CTV-NP	Q381	405 023 4903	TR 2SD400-D-MP
Q152	406 007 2106	TR JC546A		405 023 5009	TR 2SD400-E-MP
	406 007 2007	TR JC546B		405 023 5306	TR 2SD400-F-MP
	405 019 1909	TR 2SC536-E-NP	Q431	405 013 6801	TR 2SC2274-E
	405 019 2708	TR 2SC536-F-NP		405 013 7006	TR 2SC2274-F
	405 019 3804	TR 2SC536-G-NP	Q432	405 022 6809	TR 2SD1651-CTV-YB
Q202	406 007 2106	TR JC546A	Q436	405 019 3804	TR 2SC536-G-NP
	406 007 2007	TR JC546B	Q437	405 019 3804	TR 2SC536-G-NP
	405 019 1909	TR 2SC536-E-NP	Q703	406 007 2106	TR JC546A
	405 019 2708	TR 2SC536-F-NP		406 007 2007	TR JC546B
	405 019 3804	TR 2SC536-G-NP		405 019 1909	TR 2SC536-E-NP
Q311	406 007 1901	TR JC556A		405 019 2708	TR 2SC536-F-NP
	406 007 1802	TR JC556B		405 019 3804	TR 2SC536-G-NP
	405 004 4205	TR 2SA608-E-CTV-NP	Q708	406 007 1901	TR JC556A
	405 004 4809	TR 2SA608-F-CTV-NP		406 007 1802	TR JC556B
	405 028 7909	TR 2SA608-G-CTV-NP		405 004 4205	TR 2SA608-E-CTV-NP
Q312	405 058 0208	TR 2SC3807-R-CTV-YA		405 004 4809	TR 2SA608-F-CTV-NP
Q313	405 022 8506	TR 2SD1710-CTV-YB		405 028 7909	TR 2SA608-G-CTV-NP
Q351	405 009 6907	TR 2SB985-S	Q711	405 118 4207	TR PH2369
	405 009 7003	TR 2SB985-T	Q722	406 007 2106	TR JC546A
Q352	406 007 2106	TR JC546A		406 007 2007	TR JC546B
	406 007 2007	TR JC546B		405 019 1909	TR 2SC536-E-NP
	405 019 1909	TR 2SC536-E-NP		405 019 2708	TR 2SC536-F-NP
	405 019 2708	TR 2SC536-F-NP		405 019 3804	TR 2SC536-G-NP
	405 019 3804	TR 2SC536-G-NP	Q851	406 007 2106	TR JC546A
Q353	406 007 2106	TR JC546A		406 007 2007	TR JC546B
	406 007 2007	TR JC546B		405 019 1909	TR 2SC536-E-NP
	405 019 1909	TR 2SC536-E-NP		405 019 2708	TR 2SC536-F-NP
	405 019 2708	TR 2SC536-F-NP		405 019 3804	TR 2SC536-G-NP
	405 019 3804	TR 2SC536-G-NP	Q852	406 007 1901	TR JC556A
Q354	405 008 4805	TR 2SB764-E		406 007 1802	TR JC556B
				405 004 4205	TR 2SA608-E-CTV-NP
				405 004 4809	TR 2SA608-F-CTV-NP
				405 028 7909	TR 2SA608-G-CTV-NP
			Q857	406 007 2106	TR JC546A
				406 007 2007	TR JC546B
				405 019 1909	TR 2SC536-E-NP
				405 019 2708	TR 2SC536-F-NP
				405 019 3804	TR 2SC536-G-NP
			Q858	406 007 1901	TR JC556A
				406 007 1802	TR JC556B
				405 004 4205	TR 2SA608-E-CTV-NP
				405 004 4809	TR 2SA608-F-CTV-NP
				405 028 7909	TR 2SA608-G-CTV-NP
			Q881	406 007 2106	TR JC546A
				406 007 2007	TR JC546B
				405 019 1909	TR 2SC536-E-NP
				405 019 2708	TR 2SC536-F-NP
				405 019 3804	TR 2SC536-G-NP
			INTEGRATED CIRCUIT		
			IC101	409 309 6209	IC TDA8361/N3
			IC171	409 073 1509	IC AN5265

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
IC270	409 322 0505	IC TDA4662/V1	C207	403 248 2803	ELECT 2.2U M 50V
	409 291 0605	IC TDA4661/V2	C208	403 270 2901	MT-POLYEST 0.1U K 63V
IC350	409 026 8609	IC L78M05-RA		403 237 8007	MT-COMPO 0.1U J 50V
IC352	409 285 5203	IC L78M08-RA	C209	403 270 2901	MT-POLYEST 0.1U K 63V
IC451	409 183 5008	IC LA7832		403 237 8007	MT-COMPO 0.1U J 50V
IC701	410 221 1906	IC M37210M3-623SP	C210	403 270 2901	MT-POLYEST 0.1U K 63V
IC790	409 247 7702	IC ST24C02AB1		403 237 8007	MT-COMPO 0.1U J 50V
	409 281 8307	IC 24C02A/P	C211	403 270 3908	MT-POLYEST 0.47U K 63V
	409 333 3700	IC 24LC02B/P		403 256 0808	MT-COMPO 0.47U J 50V
CAPACITOR			C213	403 270 2901	MT-POLYEST 0.1U K 63V
C101	403 233 0302	ELECT 100U M 16V		403 237 8007	MT-COMPO 0.1U J 50V
C102	403 028 2009	CERAMIC 56P J 50V	C215	403 270 3908	MT-POLYEST 0.47U K 63V
C105	403 248 1400	ELECT 1U M 50V		403 256 0808	MT-COMPO 0.47U J 50V
C106	403 248 2001	ELECT 4.7U M 25V	C216	403 270 2901	MT-POLYEST 0.1U K 63V
C107	403 248 1608	ELECT 47U M 16V		403 237 8007	MT-COMPO 0.1U J 50V
C108	403 026 9703	CERAMIC 5P C 50V	C220	403 194 4609	ELECT 470U M 16V
C109	403 026 9703	CERAMIC 5P C 50V	C221	403 270 2901	MT-POLYEST 0.1U K 63V
C113	403 069 8305	CERAMIC 0.01U Z 50V		403 237 8007	MT-COMPO 0.1U J 50V
C114	403 069 8305	CERAMIC 0.01U Z 50V	C222	403 270 2901	MT-POLYEST 0.1U K 63V
C115	403 069 8305	CERAMIC 0.01U Z 50V		403 237 8007	MT-COMPO 0.1U J 50V
C117	403 248 1608	ELECT 47U M 16V	C231	403 194 2100	NP-ELECT 4.7U M 100V
C120	403 069 8305	CERAMIC 0.01U Z 50V	C234	403 248 2803	ELECT 2.2U M 50V
C121	403 061 9805	POLYESTER 0.047U J 50V	C240	403 069 8305	CERAMIC 0.01U Z 50V
	403 179 1005	POLYESTER 0.047U J 50V	C270	403 059 6205	POLYESTER 0.022U K 50V
C122	403 270 2901	MT-POLYEST 0.1U K 63V		403 179 2408	POLYESTER 0.022U K 50V
	403 237 8007	MT-COMPO 0.1U J 50V	C271	403 069 0507	CERAMIC 1000P K 50V
C123	403 233 0807	ELECT 10U M 50V	C272	403 069 0507	CERAMIC 1000P K 50V
C126	403 061 2400	POLYESTER 3900P K 50V	C275	403 248 1905	ELECT 10U M 16V
	403 179 1401	POLYESTER 3900P K 50V	<u>Δ</u> C301	404 047 3602	MT-POLYEST 0.1U M 125V
C127	403 069 0507	CERAMIC 1000P K 50V		404 066 6707	MT-POLYEST 0.1U M 250V
C128	403 248 2803	ELECT 2.2U M 50V	<u>Δ</u> C302	404 044 0901	MT-COMPO 0.1U M 250V
C129	403 028 2009	CERAMIC 56P J 50V		404 047 3602	MT-POLYEST 0.1U M 125V
C130	403 069 8305	CERAMIC 0.01U Z 50V		404 066 6707	MT-POLYEST 0.1U M 250V
C132	403 270 2901	MT-POLYEST 0.1U K 63V		404 044 0901	MT-COMPO 0.1U M 250V
	403 237 8007	MT-COMPO 0.1U J 50V	C303	403 076 7100	CERAMIC 1000P M 1K
C134	403 069 0507	CERAMIC 1000P K 50V	C304	403 076 7100	CERAMIC 1000P M 1K
C146	403 270 2901	MT-POLYEST 0.1U K 63V	C305	403 076 7100	CERAMIC 1000P M 1K
	403 237 8007	MT-COMPO 0.1U J 50V	C306	403 076 7100	CERAMIC 1000P M 1K
C153	403 011 3808	CERAMIC 120P J 50V	C307	404 038 1600	ELECT 100U M 400V
C171	403 258 3302	ELECT 33U M 16V		404 055 0907	ELECT 100U M 400V
C172	403 270 3908	MT-POLYEST 0.47U K 63V	C314	403 270 2901	MT-POLYEST 0.1U K 63V
	403 256 0808	MT-COMPO 0.47U J 50V		403 237 8007	MT-COMPO 0.1U J 50V
C173	403 056 8103	POLYESTER 1000P K 50V	C315	403 058 2604	POLYESTER 0.015U J 50V
	403 179 3900	POLYESTER 1000P K 50V		403 179 3207	POLYESTER 0.015U J 50V
C175	403 248 1905	ELECT 10U M 16V	C316	403 165 8407	CERAMIC 680P K 2K
C176	403 248 1905	ELECT 10U M 16V		403 186 1104	CERAMIC 680P K 2K
C180	403 270 2901	MT-POLYEST 0.1U K 63V	C317	403 059 6205	POLYESTER 0.022U K 50V
	403 237 8007	MT-COMPO 0.1U J 50V		403 179 2408	POLYESTER 0.022U K 50V
C181	403 218 8101	ELECT 1000U M 25V	<u>Δ</u> C331	404 060 6505	CERAMIC 2200P M 400V
C182	403 086 2300	NP-ELECT 1U M 50V		404 060 6604	CERAMIC 2200P M 400V
C185	403 199 9708	ELECT 470U M 25V	C351	403 165 6106	CERAMIC 470P K 1K
C188	403 233 1507	ELECT 4.7U M 50V		403 186 2903	CERAMIC 470P K 1K
C201	403 014 0200	CERAMIC 18P J 50V	C352	403 165 8605	CERAMIC 470P K 2K
C202	403 270 2901	MT-POLYEST 0.1U K 63V		403 232 1805	CERAMIC 470P K 2K
	403 237 8007	MT-COMPO 0.1U J 50V	C354	403 186 3108	CERAMIC 390P K 1K
C203	403 061 8303	POLYESTER 4700P K 50V	C361	404 042 4505	ELECT 220U M 160V
	403 179 1104	POLYESTER 4700P K 50V	C362	403 281 1108	ELECT 22U M 250V
C204	403 270 2901	MT-POLYEST 0.1U K 63V	C363	403 148 2002	ELECT 470U M 35V
	403 237 8007	MT-COMPO 0.1U J 50V	C364	403 148 0404	ELECT 1000U M 25V
C205	403 270 2901	MT-POLYEST 0.1U K 63V		403 134 5307	ELECT 1000U M 25V
	403 237 8007	MT-COMPO 0.1U J 50V	C365	403 148 0404	ELECT 1000U M 25V
C206	403 233 0807	ELECT 10U M 50V		403 134 5307	ELECT 1000U M 25V
			C371	403 201 5001	ELECT 330U M 16V

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
C372	403 194 4609	ELECT 470U M 16V	C729	403 248 1905	ELECT 10U M 16V
C373	403 248 1400	ELECT 1U M 50V	C741	403 270 3403	MT-POLYEST 0.22U K 63V
C381	403 248 1905	ELECT 10U M 16V		403 237 7901	MT-COMPO 0.22U J 50V
C383	403 244 1206	ELECT 100U M 10V	C742	403 270 2901	MT-POLYEST 0.1U K 63V
C401	403 270 2901	MT-POLYEST 0.1U K 63V		403 237 8007	MT-COMPO 0.1U J 50V
	403 237 8007	MT-COMPO 0.1U J 50V	C744	403 068 9006	CERAMIC 100P K 50V
C402	403 061 8303	POLYESTER 4700P K 50V	C746	403 026 0809	CERAMIC 47P J 50V
	403 179 1104	POLYESTER 4700P K 50V	C854	403 270 3908	MT-POLYEST 0.47U K 63V
C403	403 061 8303	POLYESTER 4700P K 50V		403 256 0808	MT-COMPO 0.47U J 50V
	403 179 1104	POLYESTER 4700P K 50V	C855	403 069 8305	CERAMIC 0.01U Z 50V
C404	403 086 2300	NP-ELECT 1U M 50V	C856	403 248 1905	ELECT 10U M 16V
C405	403 060 0704	POLYESTER 2700P K 50V	C859	403 068 9006	CERAMIC 100P K 50V
	403 179 2200	POLYESTER 2700P K 50V	C881	403 270 2901	MT-POLYEST 0.1U K 63V
C406	403 059 6205	POLYESTER 0.022U K 50V		403 237 8007	MT-COMPO 0.1U J 50V
	403 179 2408	POLYESTER 0.022U K 50V	RESISTOR		
C407	403 233 0302	ELECT 100U M 16V	R101	401 026 9303	CARBON 47 JA 1/6W
C410	403 056 9704	POLYESTER 0.01U J 50V	R103	401 024 6700	CARBON 100 JA 1/6W
	403 178 9309	POLYESTER 0.01U J 50V	R104	401 027 2600	CARBON 5.6K JA 1/6W
△C420	404 064 4200	MT-POLYPRO 8200P J 1.5K	R105	401 024 7004	CARBON 1K JA 1/6W
	404 046 8400	MT-POLYPRO 8200P J 1.5K	R106	401 025 7409	CARBON 220 JA 1/6W
C422	403 082 8405	POLYPRO 0.22U J 200V	R107	401 026 0409	CARBON 27 JA 1/6W
C426	403 066 6106	MT-POLYEST 0.47U J 250V	R121	401 027 5908	CARBON 68K JA 1/6W
C432	403 075 7101	CERAMIC 1000P K 500V	R123	401 025 8703	CARBON 220K JA 1/6W
C433	403 076 3102	CERAMIC 3900P K 500V	R124	401 027 5502	CARBON 6.8K JA 1/6W
C434	403 229 1207	ELECT 47U M 35V	R125	401 025 3807	CARBON 180 JA 1/6W
△C437	403 165 7301	CERAMIC 330P K 3K	R126	401 027 2600	CARBON 5.6K JA 1/6W
	403 186 0107	CERAMIC 330P K 3K	R127	401 024 6700	CARBON 100 JA 1/6W
△C441	403 082 7804	POLYPRO 0.18U J 200V	R131	401 027 5502	CARBON 6.8K JA 1/6W
△C442	403 082 8009	POLYPRO 0.2U J 200V	R132	401 027 0309	CARBON 47K JA 1/6W
C451	403 210 5504	ELECT 470U M 35V	R133	401 025 3807	CARBON 180 JA 1/6W
C452	403 217 1103	ELECT 220U M 35V	R134	401 024 7004	CARBON 1K JA 1/6W
C453	403 023 9706	CERAMIC 39P J 50V	R135	401 024 7004	CARBON 1K JA 1/6W
C454	403 069 8305	CERAMIC 0.01U Z 50V	R138	401 026 6609	CARBON 390 JA 1/6W
C455	403 076 4901	CERAMIC 560P K 500V	R143	401 026 4308	CARBON 3.3K JA 1/6W
C456	403 233 0807	ELECT 10U M 50V	R151	401 024 7004	CARBON 1K JA 1/6W
C459	403 065 9801	MT-POLYEST 0.22U K 100V	R153	401 026 3905	CARBON 330 JA 1/6W
	403 188 0907	MT-POLYEST 0.22U K 100V	R156	401 027 5205	CARBON 680 JA 1/6W
C461	403 209 7205	ELECT 2200U M 25V	R157	401 026 9303	CARBON 47 JA 1/6W
C463	403 064 8102	POLYESTER 0.047U K 100V	R165	401 027 2600	CARBON 5.6K JA 1/6W
	403 277 0207	POLYESTER 0.047U K 100V	R166	401 024 7400	CARBON 10K JA 1/6W
C469	403 233 0807	ELECT 10U M 50V	R170	401 025 1902	CARBON 15K JA 1/6W
C701	403 248 2001	ELECT 4.7U M 25V	R171	401 026 3707	CARBON 33 JA 1/6W
C703	403 018 6208	CERAMIC 220P J 50V	R172	401 027 2303	CARBON 560 JA 1/6W
C704	403 068 9006	CERAMIC 100P K 50V	R174	401 024 7400	CARBON 10K JA 1/6W
C705	403 068 9006	CERAMIC 100P K 50V	R183	401 024 7004	CARBON 1K JA 1/6W
C706	403 068 9006	CERAMIC 100P K 50V	R184	401 026 7408	CARBON 39K JA 1/6W
C707	403 068 9006	CERAMIC 100P K 50V	R201	401 027 0309	CARBON 47K JA 1/6W
C709	403 248 1400	ELECT 1U M 50V	R202	401 024 7707	CARBON 100K JA 1/6W
C711	403 248 2001	ELECT 4.7U M 25V	R203	401 024 6700	CARBON 100 JA 1/6W
C712	403 248 1400	ELECT 1U M 50V	R204	401 024 6700	CARBON 100 JA 1/6W
C713	403 248 1400	ELECT 1U M 50V	R205	401 024 6700	CARBON 100 JA 1/6W
C716	403 233 1507	ELECT 4.7U M 50V	R213	401 026 7408	CARBON 39K JA 1/6W
C717	403 068 9006	CERAMIC 100P K 50V	R215	401 025 4200	CARBON 1.8K JA 1/6W
C718	403 071 5606	CERAMIC 220P K 50V	R219	401 019 1000	CARBON 390 JA 1/4W
C719	403 069 0507	CERAMIC 1000P K 50V	R231	401 014 6109	CARBON 150K JA 1/4W
C721	403 270 2901	MT-POLYEST 0.1U K 63V	R232	401 012 5708	CARBON 1K JA 1/4W
	403 237 8007	MT-COMPO 0.1U J 50V	R235	401 026 7408	CARBON 39K JA 1/6W
C722	403 248 1608	ELECT 47U M 16V	R236	401 026 1000	CARBON 2.7K JA 1/6W
C723	403 026 0700	CERAMIC 47P J 50V	R237	401 025 7805	CARBON 2.2K JA 1/6W
C724	403 026 0700	CERAMIC 47P J 50V	R274	401 024 7400	CARBON 10K JA 1/6W
C725	403 069 8305	CERAMIC 0.01U Z 50V	R275	401 025 7409	CARBON 220 JA 1/6W
C727	403 270 2901	MT-POLYEST 0.1U K 63V	R280	401 025 1902	CARBON 15K JA 1/6W
	403 237 8007	MT-COMPO 0.1U J 50V			

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
R281	401 027 5502	CARBON 6.8K JA 1/6W	R453	401 024 7004	CARBON 1K JA 1/6W
△R301	401 008 8607	CARBON 220K JA 1/2W	R454	401 025 7409	CARBON 220 JA 1/6W
R302	402 060 8109	WIRE WOUND 3.9 KA 5W	R455	401 025 7805	CARBON 2.2K JA 1/6W
R311	401 027 2600	CARBON 5.6K JA 1/6W	R456	401 020 2003	CARBON 4.7K JA 1/4W
R315	401 025 8208	CARBON 22K JA 1/6W	R457	401 026 9907	CARBON 4.7K JA 1/6W
R317	401 024 7004	CARBON 1K JA 1/6W	R458	645 008 5642	INDUCTOR, 3.3U K
R319	401 016 1508	CARBON 22 JA 1/4W	R459	401 057 7408	OXIDE-MT 0.82 JA 1W
R320	401 007 5805	CARBON 120K JA 1/2W	R460	401 009 9306	CARBON 390 JA 1/2W
R321	401 007 5805	CARBON 120K JA 1/2W	R467	401 063 6303	OXIDE-MT 820 JA 1W
R322	401 014 5201	CARBON 15K JA 1/4W	R475	401 009 5803	CARBON 330 JA 1/2W
R323	401 025 7805	CARBON 2.2K JA 1/6W	R481	401 064 5602	OXIDE-MT 1.8 JA 2W
R324	401 069 1708	OXIDE-MT 68 JA 2W	R700	401 024 7400	CARBON 10K JA 1/6W
R325	401 069 1708	OXIDE-MT 68 JA 2W	R701	401 024 7400	CARBON 10K JA 1/6W
R326	401 018 3401	CARBON 3.3K GA 1/4W	R702	401 026 4308	CARBON 3.3K JA 1/6W
△R331	402 000 8305	SOLID 5.6M KA 1/2W	R703	401 024 7400	CARBON 10K JA 1/6W
△R332	402 000 8305	SOLID 5.6M KA 1/2W	R707	401 024 6700	CARBON 100 JA 1/6W
R350	401 012 8105	CARBON 100K JA 1/4W	R708	401 024 9701	CARBON 12K JA 1/6W
R352	401 066 9103	OXIDE-MT 27 JA 2W	R709	401 027 9005	CARBON 82K JA 1/6W
R353	401 026 9907	CARBON 4.7K JA 1/6W	R710	401 024 7004	CARBON 1K JA 1/6W
R354	401 014 6109	CARBON 150K JA 1/4W	R711	401 026 4308	CARBON 3.3K JA 1/6W
R355	401 060 9307	OXIDE-MT 27K JA 1W	R712	401 025 4200	CARBON 1.8K JA 1/6W
R356	401 013 6407	CARBON 12K JA 1/4W	R713	401 025 1902	CARBON 15K JA 1/6W
R360	401 059 3903	OXIDE-MT 1.5K JA 1W	R715	401 024 7400	CARBON 10K JA 1/6W
R362	401 068 6209	OXIDE-MT 5.6 JA 2W	R716	401 026 4605	CARBON 33K JA 1/6W
R364	401 012 7009	CARBON 10K JA 1/4W	R717	401 024 9305	CARBON 1.2K JA 1/6W
R365	401 019 1901	CARBON 3.9K JA 1/4W	R718	401 026 7002	CARBON 3.9K JA 1/6W
R366	401 012 7009	CARBON 10K JA 1/4W	R721	401 026 4605	CARBON 33K JA 1/6W
R367	401 013 5301	CARBON 1.2K JA 1/4W	R723	401 024 7004	CARBON 1K JA 1/6W
R370	401 027 8602	CARBON 8.2K JA 1/6W	R724	401 024 7400	CARBON 10K JA 1/6W
R371	401 024 9701	CARBON 12K JA 1/6W	R726	401 027 2600	CARBON 5.6K JA 1/6W
R372	401 026 7606	CARBON 390K JA 1/6W	R733	401 024 9701	CARBON 12K JA 1/6W
R373	401 027 3201	CARBON 560K JA 1/6W	R734	401 026 9907	CARBON 4.7K JA 1/6W
R374	401 025 8703	CARBON 220K JA 1/6W	R735	401 027 8602	CARBON 8.2K JA 1/6W
R375	401 025 8208	CARBON 22K JA 1/6W	R736	401 025 1605	CARBON 1.5K JA 1/6W
R376	401 024 7400	CARBON 10K JA 1/6W	R737	401 024 9701	CARBON 12K JA 1/6W
R382	401 058 1108	OXIDE-MT 10 JA 1W	R738	401 024 9701	CARBON 12K JA 1/6W
R383	401 025 3807	CARBON 180 JA 1/6W	R740	401 027 9005	CARBON 82K JA 1/6W
R401	401 024 6700	CARBON 100 JA 1/6W	R741	401 024 7400	CARBON 10K JA 1/6W
R402A	401 024 8001	CARBON 1M JA 1/6W	R742	401 024 6700	CARBON 100 JA 1/6W
R403	401 024 6700	CARBON 100 JA 1/6W	R743	401 025 1308	CARBON 150 JA 1/6W
R404	401 025 8208	CARBON 22K JA 1/6W	R744	401 026 9907	CARBON 4.7K JA 1/6W
R405	401 024 6700	CARBON 100 JA 1/6W	R745	401 025 1308	CARBON 150 JA 1/6W
R406	401 026 7606	CARBON 390K JA 1/6W	R746	401 026 9907	CARBON 4.7K JA 1/6W
R407	401 025 8208	CARBON 22K JA 1/6W	R747	401 024 6700	CARBON 100 JA 1/6W
R408	401 024 6700	CARBON 100 JA 1/6W	R748	401 024 6700	CARBON 100 JA 1/6W
R409	401 026 9907	CARBON 4.7K JA 1/6W	R749	401 026 7002	CARBON 3.9K JA 1/6W
R410	401 025 8208	CARBON 22K JA 1/6W	R750	401 026 4308	CARBON 3.3K JA 1/6W
R412	401 027 0309	CARBON 47K JA 1/6W	R758	401 027 2600	CARBON 5.6K JA 1/6W
R413	401 026 9907	CARBON 4.7K JA 1/6W	R759	401 025 7805	CARBON 2.2K JA 1/6W
R414	401 026 1000	CARBON 2.7K JA 1/6W	R761	401 065 8503	OXIDE-MT 15K JA 2W
R415	401 026 4605	CARBON 33K JA 1/6W	R762	401 024 7400	CARBON 10K JA 1/6W
R416	401 024 7400	CARBON 10K JA 1/6W	R763	401 025 1902	CARBON 15K JA 1/6W
R417	401 025 8208	CARBON 22K JA 1/6W	R764	401 025 4903	CARBON 180K JA 1/6W
R418	401 026 1307	CARBON 27K JA 1/6W	R766	401 027 2600	CARBON 5.6K JA 1/6W
R422	402 069 8704	WIRE WOUND 8.2 KA 7W	R767	401 026 9907	CARBON 4.7K JA 1/6W
R432	401 024 7004	CARBON 1K JA 1/6W	R768	401 020 0801	CARBON 470 JA 1/4W
R433	401 010 3102	CARBON 470 JA 1/2W	R774	401 027 0309	CARBON 47K JA 1/6W
R434	401 009 9306	CARBON 390 JA 1/2W	R775	401 027 0309	CARBON 47K JA 1/6W
R436	401 014 5201	CARBON 15K JA 1/4W	R776	401 027 0309	CARBON 47K JA 1/6W
R441	401 058 3706	OXIDE-MT 1K JA 1W	R780	401 024 7707	CARBON 100K JA 1/6W
R448	401 008 0908	CARBON 180 JA 1/2W	R781	401 025 2305	CARBON 150K JA 1/6W
R451	401 026 8108	CARBON 4.7 JA 1/6W	R787	401 024 7400	CARBON 10K JA 1/6W
R452	401 027 8602	CARBON 8.2K JA 1/6W	R791	401 026 6609	CARBON 390 JA 1/6W

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
R795	401 026 6609	CARBON 390 JA 1/6W	L441	610 000 0605	LINEARITY COIL
R796	401 025 1605	CARBON 1.5K JA 1/6W		610 210 8071	LINEARITY COIL
R802	401 026 9600	CARBON 470 JA 1/6W	L442	610 000 0278	COIL
R810	401 024 7400	CARBON 10K JA 1/6W		610 205 1117	COIL
R811	401 025 1308	CARBON 150 JA 1/6W	L451	610 210 3908	PEAKING COIL 33UHK
R812	401 025 1605	CARBON 1.5K JA 1/6W		645 001 5748	INDUCTOR, 33U K
R813	401 026 9907	CARBON 4.7K JA 1/6W	L702	645 008 0203	INDUCTOR, 5.6U K
R814	401 026 9907	CARBON 4.7K JA 1/6W	L703	645 008 0203	INDUCTOR, 5.6U K
R815	401 027 5502	CARBON 6.8K JA 1/6W	L704	645 003 9782	INDUCTOR, 22U K
R816	401 025 1902	CARBON 15K JA 1/6W	L705	645 011 0221	INDUCTOR, 1.5U K
R817	401 027 0309	CARBON 47K JA 1/6W	L706	645 001 4727	INDUCTOR, 10U K
R850	401 024 7707	CARBON 100K JA 1/6W	L852	645 001 4567	INDUCTOR, 10U K
R851	401 024 9701	CARBON 12K JA 1/6W			
R852	401 024 9701	CARBON 12K JA 1/6W	DIODE		
R853	401 027 2600	CARBON 5.6K JA 1/6W	D123	407 012 4208	DIODE 1SS131
R854	401 027 2303	CARBON 560 JA 1/6W		407 012 6004	DIODE 1SS178
R855	401 027 6608	CARBON 75 JA 1/6W	D171	408 007 8607	DIODE 1N4148
R856	401 026 7408	CARBON 39K JA 1/6W		407 013 1206	DIODE 1S1555
R857	401 026 1307	CARBON 27K JA 1/6W	D172	408 007 8607	DIODE 1N4148
R858	401 027 6608	CARBON 75 JA 1/6W		407 013 1206	DIODE 1S1555
R859	401 027 6608	CARBON 75 JA 1/6W	D201	407 075 9905	ZENER DIODE EQA03-11A
R860	401 027 6608	CARBON 75 JA 1/6W		407 063 8309	ZENER DIODE MTZJ11C
R861	401 027 6608	CARBON 75 JA 1/6W	D202	407 075 9905	ZENER DIODE EQA03-11A
R862	401 027 6608	CARBON 75 JA 1/6W		407 063 8309	ZENER DIODE MTZJ11C
R866	401 026 9907	CARBON 4.7K JA 1/6W	D203	407 075 9905	ZENER DIODE EQA03-11A
R867	401 026 9600	CARBON 470 JA 1/6W		407 063 8309	ZENER DIODE MTZJ11C
R868	401 024 7400	CARBON 10K JA 1/6W	D231	407 005 4505	DIODE DS442X
R870	401 024 7400	CARBON 10K JA 1/6W		407 013 1008	DIODE 1S1553
R881	401 024 7004	CARBON 1K JA 1/6W		407 013 4306	DIODE 1S2076A
R882	401 024 9305	CARBON 1.2K JA 1/6W		407 013 6508	DIODE 1S2471
R883	401 026 4308	CARBON 3.3K JA 1/6W	D232	408 007 8607	DIODE 1N4148
R885	401 024 9305	CARBON 1.2K JA 1/6W		407 013 1206	DIODE 1S1555
R887	401 024 7004	CARBON 1K JA 1/6W	D233	408 007 8607	DIODE 1N4148
				407 013 1008	DIODE 1S1553
			D234	408 007 8607	DIODE 1N4148
				407 013 1206	DIODE 1S1555
			D274	407 012 4406	DIODE 1SS133
				407 012 5809	DIODE 1SS176
			D275	407 163 8209	ZENER DIODE UZ-5.1BCC
			D303	407 006 6300	DIODE ERC05-10B
				407 009 6901	DIODE RM11C
			D304	407 006 6300	DIODE ERC05-10B
				407 009 6901	DIODE RM11C
			D305	407 006 6300	DIODE ERC05-10B
				407 009 6901	DIODE RM11C
			D306	407 006 6300	DIODE ERC05-10B
				407 009 6901	DIODE RM11C
			D314	407 005 4505	DIODE DS442X
				407 013 1008	DIODE 1S1553
				407 013 4306	DIODE 1S2076A
				407 013 6508	DIODE 1S2471
			<u>Δ</u> D315	407 105 8700	PHOTO COUPLE PC113B
				408 009 8407	PHOTO COUPLE CNY17F-30PT6
			D316	407 005 4505	DIODE DS442X
				407 013 1008	DIODE 1S1553
				407 013 4306	DIODE 1S2076A
				407 013 6508	DIODE 1S2471
			D317	407 007 6606	DIODE ES1
				407 007 6903	DIODE ES1Z
				408 009 9008	DIODE BYD33D
			D318	407 005 4505	DIODE DS442X
				407 013 1008	DIODE 1S1553
				407 013 4306	DIODE 1S2076A
VARIABLE RESISTOR					
VR120	645 006 5422	VR, SEMI, 10K N			
	610 239 7567	VR B-10K			
VR351	645 006 5514	VR, SEMI, 2.2K N			
	610 239 7581	VR B-2K			
VR401	645 006 5422	VR, SEMI, 10K N			
	610 239 7567	VR B-10K			
VR431	645 006 5408	VR, SEMI, 100 N			
	610 232 7908	VR, SEMI, 100 N			
TRANSFORMER					
T101	610 037 4508	S COIL			
<u>Δ</u> T311	645 007 7487	TRANS, POWER, PULSE			
	645 009 0332	TRANS, POWER, PULSE			
T431	610 000 1053	DRIVE TRANS			
	610 000 1060	DRIVE TRANS			
<u>Δ</u> T471	610 233 6078	FBT			
COIL					
L103	645 008 2863	INDUCTOR, 4.7U K			
L135	645 003 9751	INDUCTOR, 18U K			
L152	645 008 2863	INDUCTOR, 4.7U K			
L201	645 008 2863	INDUCTOR, 4.7U K			
L202	645 008 2863	INDUCTOR, 4.7U K			
L203	645 008 2863	INDUCTOR, 4.7U K			
L230	610 037 4522	S COIL			
L280	645 001 4727	INDUCTOR, 10U K			
<u>Δ</u> L301	610 221 6912	LINE FILTER			
L420	610 032 0703	INDUCTOR			

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
	407 013 6508	DIODE 1S2471	△SW301	645 003 6811	SWITCH,PUSH POWER 2P-2T
D319	407 151 9003	ZENER DIODE UZ-7.5BCC	SW451	610 011 2728	SWITCH,LEVER 1P-3T
	407 151 9102	ZENER DIODE UZ-8.2BCA	SW701	610 011 2698	SWITCH,PUSH
D351	407 007 7702	DIODE EU2A	SW702	610 011 2698	SWITCH,PUSH
D352	407 007 7504	DIODE EU1C	SW703	610 011 2698	SWITCH,PUSH
D353	407 007 7603	DIODE EU2	SW704	610 011 2698	SWITCH,PUSH
	408 007 2506	DIODE BYW32	SW705	610 011 2698	SWITCH,PUSH
D354	407 007 7603	DIODE EU2	SW706	610 011 2698	SWITCH,PUSH
	408 007 2506	DIODE BYW32	X101	421 004 7404	SAW F TSF5343
D355	407 007 7603	DIODE EU2	X131	645 001 7902	TRAP,CERAMIC 6.0MHZ
	408 007 2506	DIODE BYW32		610 015 2885	TRAP,CERAMIC 6.0MHZ
D361	407 151 8600	ZENER DIODE UZ-6.2BCC	X151	645 003 2813	CERAMIC FILTER
	407 164 9908	ZENER DIODE UZ-6.8BCA	X201	610 239 3347	CRYSTAL OSCILLATOR
D362	408 007 8607	DIODE 1N4148	X701	645 000 6692	OSC,CERAMIC 8.00MHZ
	407 013 1206	DIODE 1S1555		645 002 1039	OSC,CERAMIC 8.00MHZ
D364	408 007 8607	DIODE 1N4148			
	407 013 1206	DIODE 1S1555			
D365	408 007 8607	DIODE 1N4148			
	407 013 1206	DIODE 1S1555			
D366	408 007 8607	DIODE 1N4148			
	407 013 1206	DIODE 1S1555			
D370	408 007 8607	DIODE 1N4148			
	407 013 1206	DIODE 1S1555			
D371	407 151 8600	ZENER DIODE UZ-6.2BCC			
	407 164 9908	ZENER DIODE UZ-6.8BCA			
D372	408 007 8607	DIODE 1N4148			
	407 013 1206	DIODE 1S1555			
D381	407 127 3400	ZD BZX55C12-GPS-26			
	407 163 9206	ZENER DIODE UZ-13BCA			
	407 164 4705	ZENER DIODE UZ-13BCB			
D401	407 075 9905	ZENER DIODE EQA03-11A			
	407 063 8309	ZENER DIODE MTZJ11C			
D431	407 163 9909	ZENER DIODE UZ-9.1BCA			
	407 162 2703	ZENER DIODE UZ-9.1BCB			
D451	407 005 7308	DIODE EM01Z			
	408 009 9008	DIODE BYD33D			
D471	407 118 2207	ZENER DIODE 1Z75			
D701	407 116 6504	LED SLP-181B-51			
D703	407 055 7907	ZENER DIODE RD3.6EL			
D704	409 013 0104	IC HZT33			
	409 026 8005	IC L5630			
	409 057 5103	IC UPC574J			
D705	407 075 9905	ZENER DIODE EQA03-11A			
	407 063 8309	ZENER DIODE MTZJ11C			
D712	408 007 8607	DIODE 1N4148			
	407 013 1206	DIODE 1S1555			
D721	407 012 4406	DIODE 1SS133			
	407 012 5809	DIODE 1SS176			
D862	407 012 4406	DIODE 1SS133			
	407 012 5809	DIODE 1SS176			
MISCELLANEOUS					
F301	423 022 2102	FUSE 250V 4A			
A101	645 009 5993	TUNER,U			
A701	645 007 1546	UNIT,REMOCON RECEIVER			
	610 224 5806	RC PREAMP 409-1L			
K801	610 009 8275	SOCKET 21P			
	610 218 6673	SOCKET 21P			
	610 225 2361	SOCKET 21P			
△PS301	408 003 6805	THERMISTOR 902P44E180MR14			
	408 015 1904	THERMISTOR PA3A5180B270			
	408 000 3906	TH PTH451A112BF180M270			
SW220	610 011 2728	SWITCH,LEVER 1P-3T			

**ASSY,PWB,CRT E8JE
1AA0B10E13000**

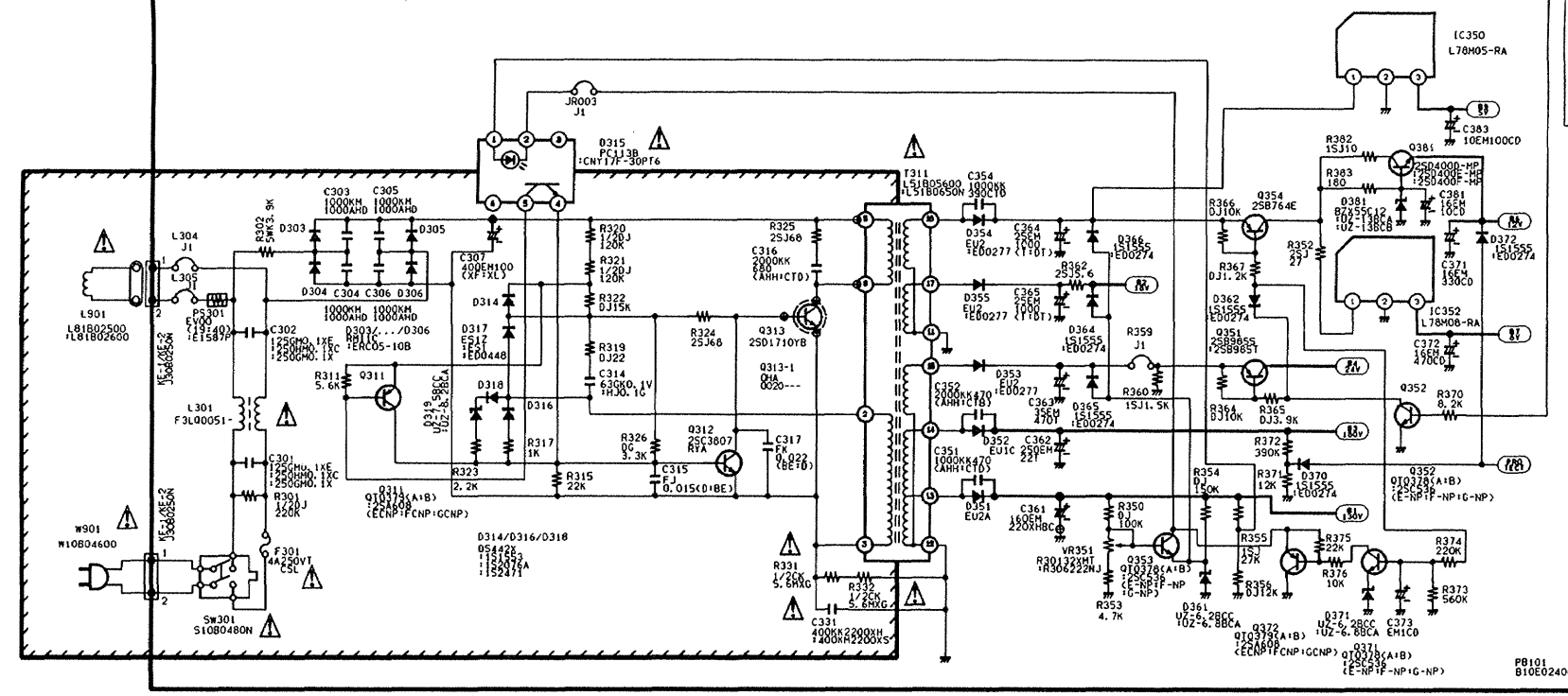
**Same as for Model C21EF57B-00
See page 18**

MAIN UNIT

IC101	IC171
3.0V 1	52 0.6V
5.9V 2	51 0.7V
5.9V 3	50 0.3V
5.1V 4	49 1.4V
5.1V 5	48 0.4V
3.9V 6	47 0.5V
3.2V 7	46 0.0V
0V 8	45 0.0V
0V 9	44 0.3V
8.0V 10	43 0.8V
0V 11	42 2.5V
3.2V 12	41 0.2V
4.2V 13	40 0.3V
4.3V 14	39 0.0V
3.4V 15	38 0.4V
0V 16	37 0.1V
4.9V 17	36 0.0V
1.9V 18	35 0.2V
1.9V 19	34 0.2V
1.9V 20	33 0.4V
0V 21	32 0V
3.4V 22	31 1.5V
3.4V 23	30 1.5V
3.4V 24	29 0.3V
2.3V 25	28 0.3V
1.5V 26	27 0.2V

IC451	IC790
0V 1	8 0.5V
13.3V 2	7 0V
23.7V 3	6 0.4V
0.8V 4	5 0V
0.7V 5	4 0V
23.6V 6	3 0V
0.8V 7	2 0V

IC701
0.5V 1
0.2V 2
2.3V 3
1.6V 4
0.9V 5
2.7V 6
3.5V 7
0V 8
0.1V 9
7.5V 10
3.0V 11
4.0V 12
4.0V 13
3.7V 14
5.1V 15
5.0V 16
0V 17
0V 18
0V 19
0V 20
0V 21
0.1V 22
0V 23
2.3V 24
2.3V 25
0V 26



MAIN UNIT

Q312		
	VOLT.	WAVEFORM
B	-0.7V	 6.6Vp-p
C	-0.6V	 4.0Vp-p
E	0V	

Q313		
	VOLT.	WAVEFORM
B	-0.6V	 4.0Vp-p
C	-	 660Vp-p
E	0V	

Q431		
	VOLT.	WAVEFORM
B	0.5V	 0.5Vp-p HORIZ.
C	14.0V	 50Vp-p HORIZ.
E	0V	

Q432		
	VOLT.	WAVEFORM
B	0.1V	 12Vp-p HORIZ
C	-	 1100Vp-p HORIZ.
E	0V	

IC350	IC352	Q101	Q131	Q132	Q133	Q134	Q152	Q202	Q311	Q351	Q352	Q353	Q354	Q371	Q372	Q381	Q436
VOLT.	VOLT.	VOLT.	VOLT.	VOLT.	VOLT.	VOLT.	VOLT.	VOLT.	VOLT.	VOLT.	VOLT.	VOLT.	VOLT.	VOLT.	VOLT.	VOLT.	VOLT.
1 5.7V	1 12.2V	B 1.2V	B 3.2V	B 3.6V	B 9.0V	B 3.7V	B 3.8V	B 0.7	B 4.9V	B 23.1V	B 0.7V	B 6.8V	B 14.9V	B 0.8V	B 36.7V	B 12.6V	B 0V
2 0V	2 0V	C 5.9V	C 0V	C 0V	C 3.5V	C 0V	C 8.0V	C 0V	C 0.7V	C 23.7V	C 36.8V	C 36.8V	C 15.5V	C 0V	C 0V	C 11.9V	C 6.4V
3 5.0V	3 8.0V	E 0.5V	E 3.9V	E 3.0V	E 9.4V	E 4.7V	E 3.2V	E 0V	E 15.2V	E 23.8V	E 0V	E 6.2V	E 15.7V	E 1.0V	E 36.7V	E 11.9V	E 0V

Q437	Q703	Q708	Q711	Q722	Q851	Q852	Q857	Q858	Q881
VOLT.	VOLT.	VOLT.	VOLT.	VOLT.	VOLT.	VOLT.	VOLT.	VOLT.	VOLT.
B 0.6V	B 2.4V	B 4.4V	B 0.6V	B 0V	B 0V	B 0V	B 0V	B 4.3V	B 4.4V
C 0V	C 11.9V	C 5.0V	C 5.3V	C 5.0V	C 0V	C 0V	C 0V	C 0V	C 11.8V
E 0V	E 4.7V	E 5.0V	E 0V	E 0V	E 0V	E 0.6V	E 0V	E 5.0V	E 3.7V

The service Precaution:
The area enclosed by this line (---) is directly connected with AC mains voltage. When servicing the area, connect an isolating transformer between TV receiver and AC line to eliminate hazard of electric shock.

COLOUR TELEVISION
EC3-A CHASSIS SERIES
CB5153
SERVICE C21EF50B-00
REF.NO.

Product safety notice:
Product safety should be considered when a component replacement is made in any area of a receiver. Components indicated by a mark (Δ) in this circuit diagram show components whose values have special significance to product safety. It is particularly recommended that only parts specified on the part service manual be used for components replacement pointed out by the mark.

Circuit diagram notes:
1. All resistance values are in ohms, K=1,000, M=1,000,000.
2. All resistance rated wattages are 1/8W unless otherwise noted.
3. Excepting electrolytic capacitors, all capacitance values of less than 1 are expressed in pF and more than 1 are pF.
4. All capacitance rated wattages are 50V unless otherwise noted.
5. All inductance values are in μH.
6. Voltage readings taken with taken with a "VTVM" are from point indicated chassis ground. Voltage readings taken by using a colour bar signal are with all controls at normal and AFC switch in "OFF" position. Some voltages may vary with signal strength.
7. Waveforms were taken with colour bar and controls adjusted for normal picture. Waveforms were taken by using a wide band oscilloscope and a low capacity probe.
8. This circuit diagram covers a basic or representative chassis only. There may be some components or partial circuit differences between the actual chassis and the circuit diagram.

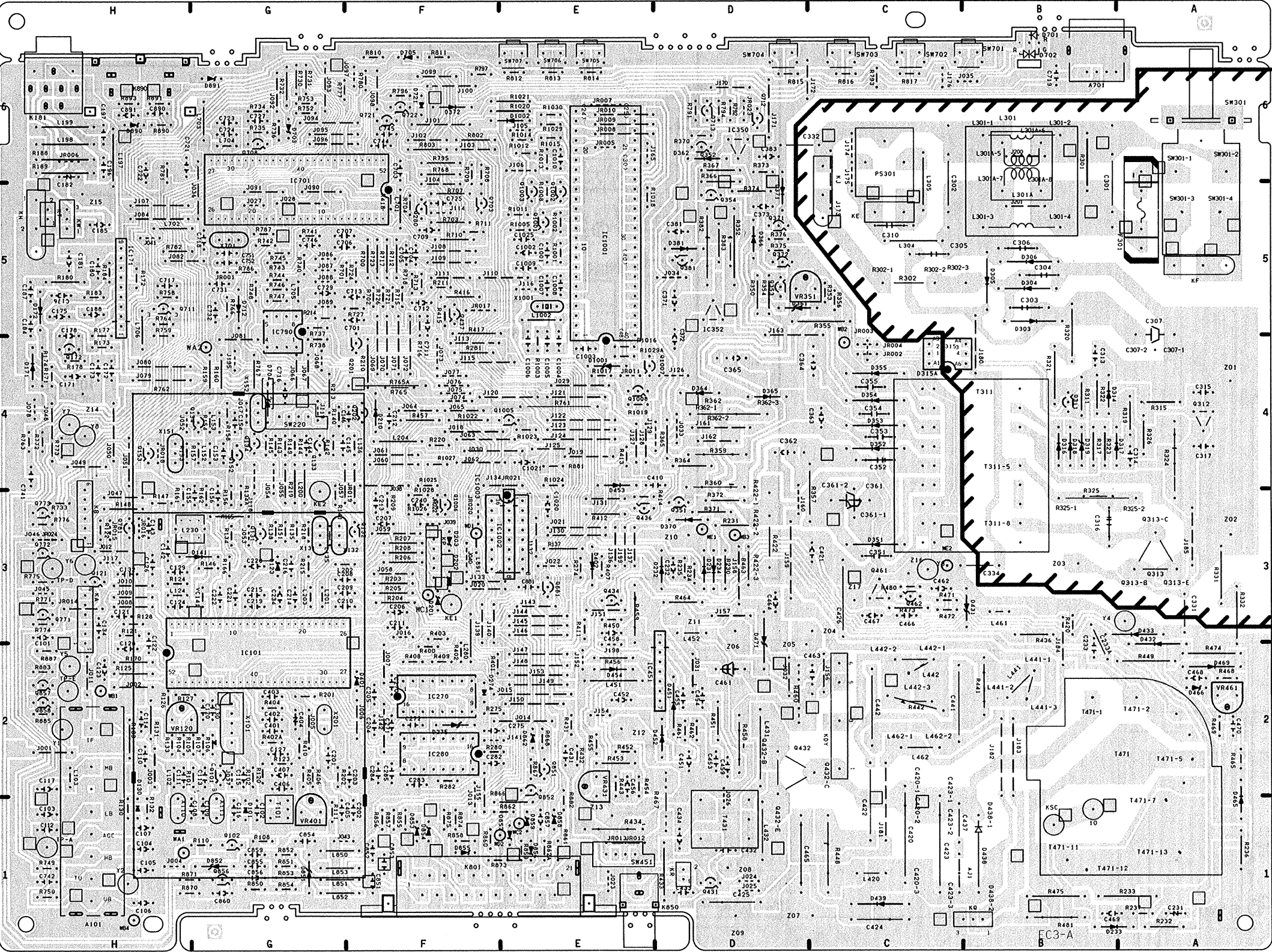
9. Expression of capacitance and resistance in circuit diagram.
Capacitance (Example)
1000 C M 2000 D
Characteristic
Capacitance value (220pF)
Allowable error (±20%)
Kind (Ceramic)
Rated voltage (1,000V)
Resistance (Example)
1/2 W 1.2
Resistance value (1.2Ω)
Allowable error (±5%)
Kind (M.carbon)
Rated wattage (1/2W)

10. Diode 1S1555 may be replaced with 1S2473, 1S2075 or DS472 unless otherwise noted.
■ Transistor 2SC538(E,F,G) may be replaced with 2SC1740S(Q,R,S), 2SC945A(Q,R,P) or 2SC1815(G,O,Y) unless otherwise noted.
■ Transistor 2SA608(E,F) may be replaced with 2SA933(Q,R), 2SA564(QA,RA), or 2SA1015(O,Y) unless otherwise noted.

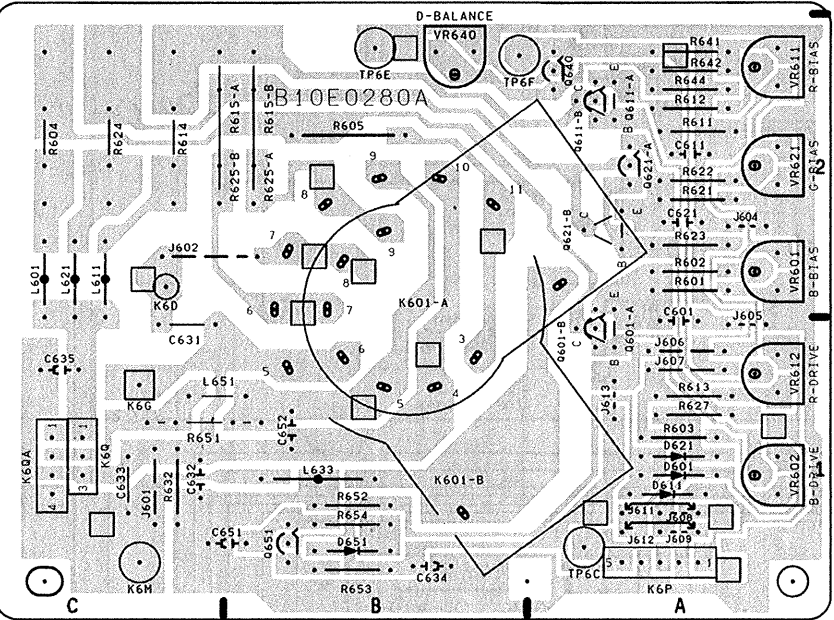
Transistor, Diode & Integrated Circuit terminal guide
C : Collector
B : Base
E : Emitter
A : Anode
K : Cathode
N2
N2-1
N2-2
N2-3
N2-4
N2-5
N2-6
N2-7
N2-8
N2-9
N2-10
N2-11
N2-12
N2-13
N2-14
N2-15
N2-16
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N2-100

Particular parts symbol
Fusible resistor
Non-pole electrolytic capacitor
Posistor

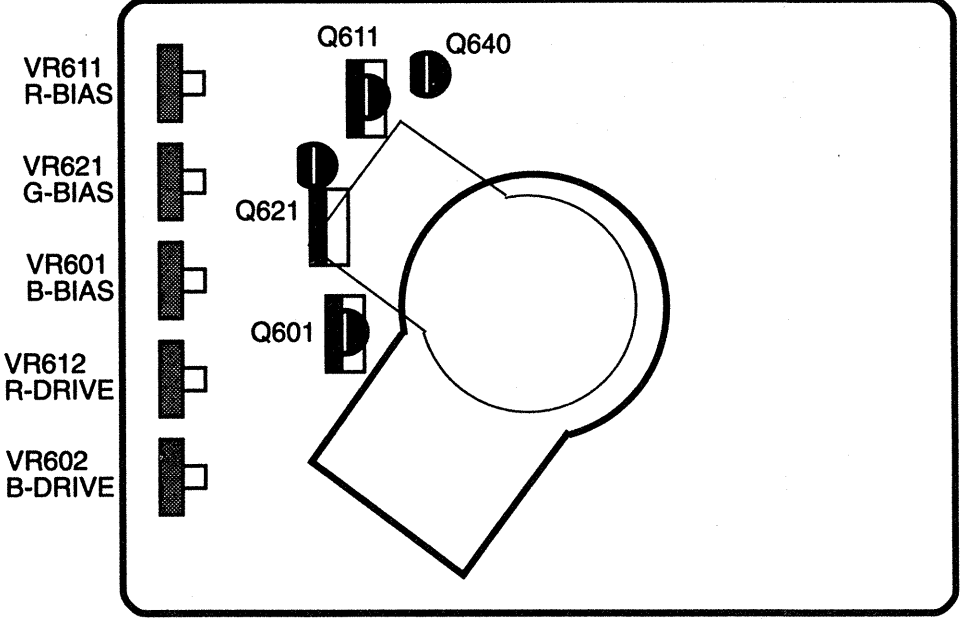
MAIN BOARD (CIRCUIT SIDE)



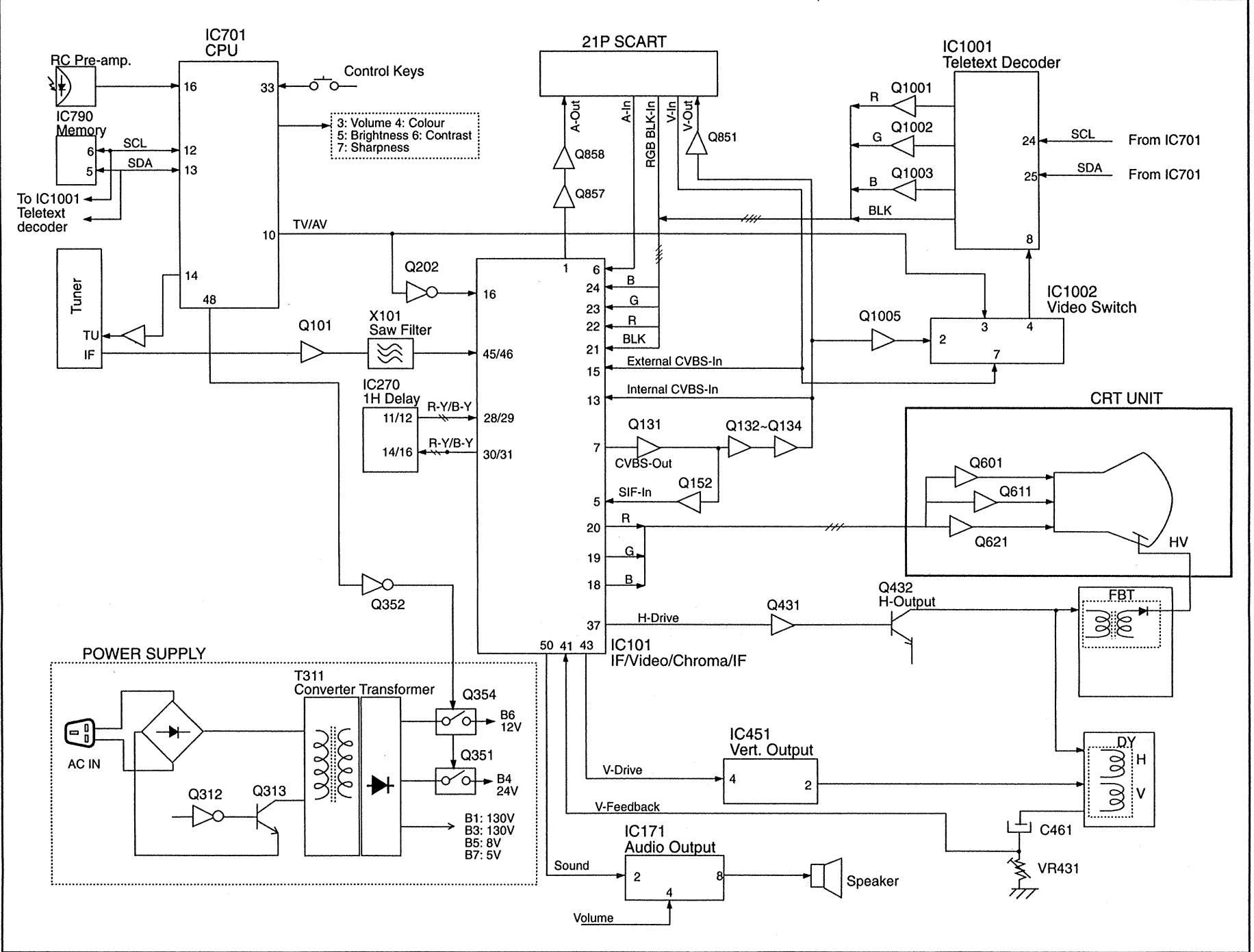
CRT BOARD (CIRCUIT SIDE)



CRT BOARD (COMPONENT SIDE)



BLOCK DIAGRAM



MAIN BOARD (COMPONENT SIDE)

